PCM DIGITAL AUDIO PROCESSOR FOR PORFESSIONAL USE

PCM-10

PCM DIGITAL AUDIO PROCESSOR FOR PROFESSIONAL USE

PCM-100

SERVICE MANUAL (3)

For plug-in type digital-circuit printed cards.

SONY®

SERVICE MANUAL

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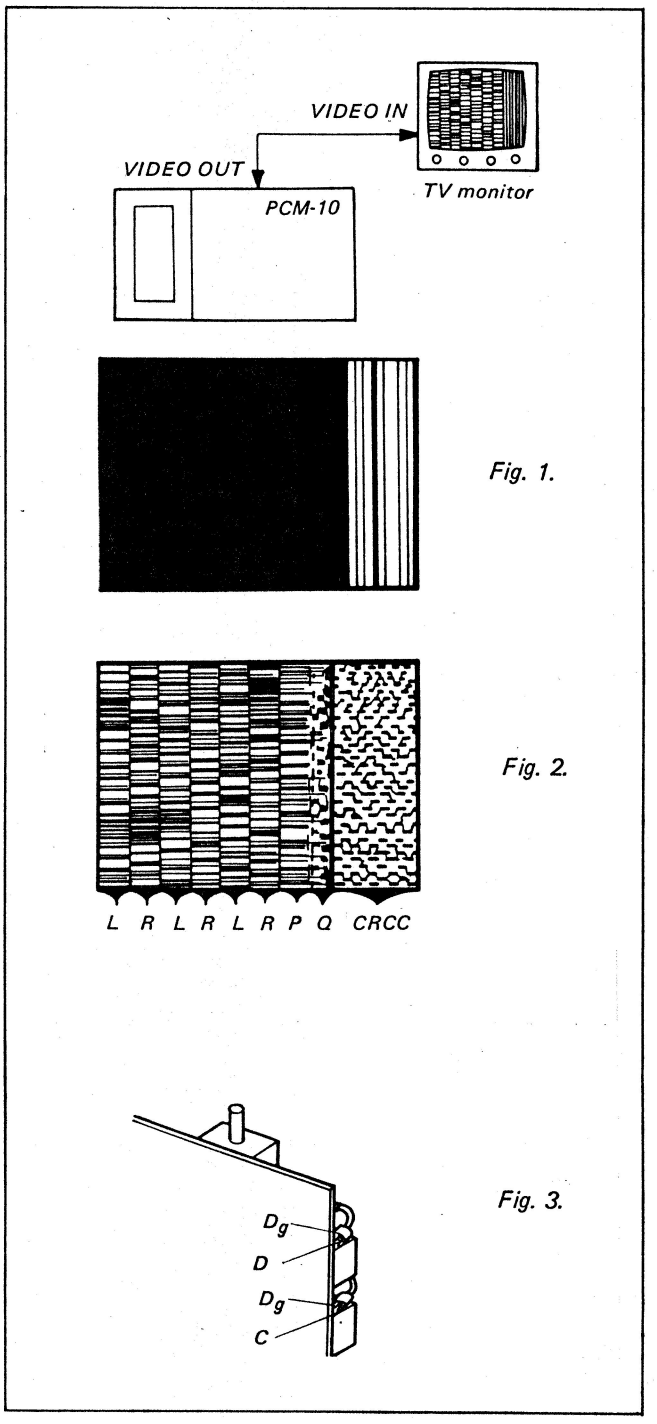
SECTION 1
ELECTRICAL ADJUSTMENT

1-1. A/D CONVERSION OFFSET ADJUSTMENT (PCM-10)

1. Make sure that the PB-1, PB-2, digital REC, AD/DA and audio boards are plugged in the PCM Unit.
2. Unplug the AD/DA board and connect it to the PCM unit by menas of the extension board supplied from Sony.
3. Connect a TV monitor to the PCM unit as shown.
4. Wait a few minutes after the power switch is turned on.
5. Make the offset adjustment in the order, observing the TV monitor.
   1) Set the offset switch to the "connector" side. Adjust VR-7 for the picture as shown in Fig. 1 on the monitor screen.
   2) After the adjustment, set the offset switch (S01) to the "dubbing switch" side.
   3) Short the terminal ⑩ of IC15 and the minus side of C52 with a lead wire. Adjust VR6 for the picture as shown in Fig. 1 on the monitor screen.
   4) After the adjustment, remove the lead wire used in the procedure (3).
   5) Short the jumper wires C to Cg, and D to Dg with lead wires to short the input of the low-pass filter. See Fig. 3.
   6) Adjust VR5 (L-CH) and VR4 (R-CH) for the picture as shown in Fig. 2 on the monitor screen.
   7) After the adjustment, remove the lead wires used in the procedure (6).

   Note: Refer to the mounting diagram for the adjustment parts location and the shorting position.

Connection Diagram for A/D conversion offset adjustment



1-2. D/A CONVERSION OFFSET ADJUSTMENT (PCM-10)

1. Make sure that the A/D conversion offset adjustment has been completed.
2. Connect the test equipment as shown in Fig. 4.
3. Set the offset switch (S01) to "CONNECTOR" side.
4. Connect the digital voltmeter to the terminal ⑰ of IC29 (DAC71COB-V12) and adjust VR3 for a voltage of −0.3 to +0.3 mV dc (0V if possible) on the voltmeter.
5. Connect the digital voltmeter to the terminal ⑥ of IC2, and adjust VR1 for a voltage of −0.3 to +0.3 mV dc (0V if possible) on the voltmeter.
6. Connect the digital voltmeter to the terminal ⑥ of IC5, and adjust VR2 for a voltage of −0.3 to +0.3 mV dc (0V if possible) on the voltmeter.
7. After the adjustment, set the offset switch to "dubbing switch" side.

Connection Diagram for D/A conversion offset adjustment

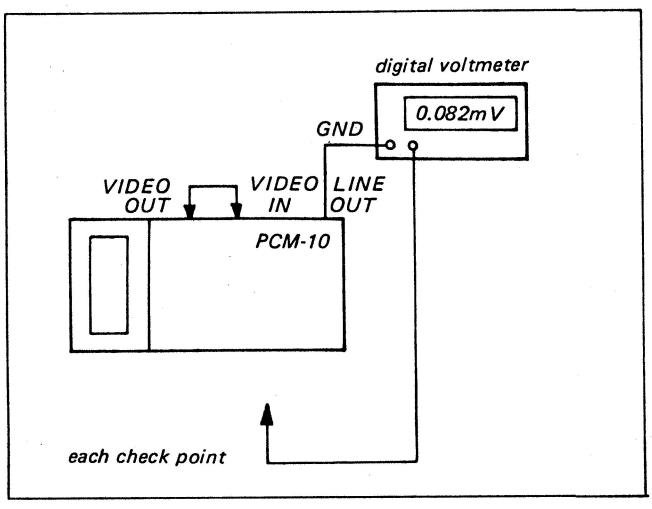


Fig. 4.

The minus lead of the voltmeter should be connected to the ground side of LINE OUT jack.

1-3. ANALOG-CIRCUIT OFFSET ADJUSTMENT (PCM-10)

1. Power Voltage Check
   1) Make sure that the PB-2, PB-1, digital REC, AD/DA and audio boards are plugged in the PCM unit.
   2) Unplug the audio board and connect it to the unit by means of the extension board supplied from Sony.
   3) Check the voltage at the terminals ② of IC601, IC610 (FS7815), and IC602, IC611 (FS7915).

Specification:	Power Voltage
IC601, IC610	+15V ± 0.6V
IC602, IC611	−15V ± 0.6V

2. Offset Adjustment (IN side)
   1) Connect the PCM unit, a TV monitor, and a digital voltmeter as shown in Fig. 5. Wait about five minutes after the power switch is turned on.
   2) Connect the digital voltmeter to the connector terminals ⑲ (L-CH) and ⑰ (R-CH) on the audio board.
   3) Turn the REC LEVEL control fully counterclockwise. Adjust VR503 (L-CH) and VR553 (R-CH) so that the digital voltmeter reads −0.3 to +0.3 mV dc (0 mV if possible).
   4) Turn the REC LEVEL control fully clockwise. Adjust VR502 (L-CH) and VR552 (R-CH) so that the digital voltmeter reads the same voltage as that obtained in the procedure 3).
   5) When turning the REC LEVEL control from fully-counterclockwise position to fully-clockwise position, the indication of the voltmeter does not change. If necessary, repeat the procedures 3) to 5).
   6) Connect the digital voltmeter to the terminals ② of IC505 (L-CH) and IC555 (R-CH). Adjust VR507 (L-CH) and VR557 (R-CH) so that the voltmeter reads −0.3 to +0.3 mV.

Connection Diagram for Analog circuit offset adjustment

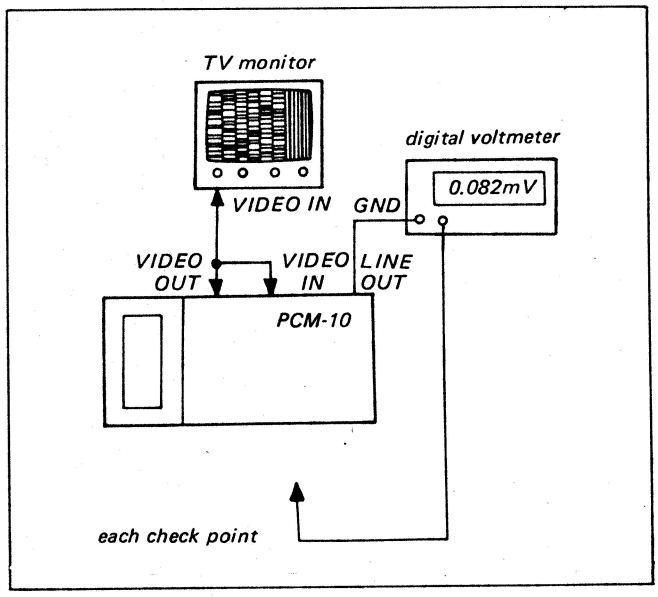


Fig. 5.

The minus lead of the voltmeter should be connected to the ground side of LINE OUT jack.

Note: Short the LINE IN jack with a shorting plug.

1-4. OFFSET ADJUSTMENT (OUT SIDE) (PCM-10)

Note: Make sure that the offset adjustment for AD/DA board has been completed.

1. Connect the test equipment as shown in Fig. 5.
2. Turn the REC LEVEL control fully counterclockwise and set the emphasis switch to OFF.
3. Connect a digital voltmeter to the LINE OUT jack and adjust VR505 (L-CH) and VR555 (R-CH) for a voltage of −0.3 to +0.3 mV on the voltmeter.

1-5. DITHER LEVEL ADJUSTMENT (PCM-10)

Settings: Emphasis switch; OFF
REC LEVEL control; minimum
LINE IN jack; Shorted

1. Prepare a low-pass filter as shown in Fig. 6.
2. Check the dither level at the terminals ⑲ (L-CH) and ⑰ (R-CH) of the connector on the audio board.
   Specification: −80 dBm (through a low-pass filter)
3. If the specification is not met, turn VR504 (L-CH) and VR554 (R-CH).

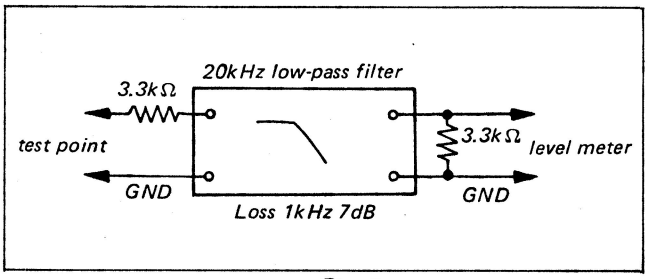


Fig. 6

1-6. MONITOR LEVEL ADJUSTMENT (PCM-10)

1. Connect the VIDEO IN jack and the VIDEO OUT jack directly.
2. Feed a 1 kHz signal of −10 dBm to the LINE IN jack.
3. Adjust the REC LEVEL control for −10 dBm at the LINE OUT jack. Specification: −10 ± **0.5 dBm**

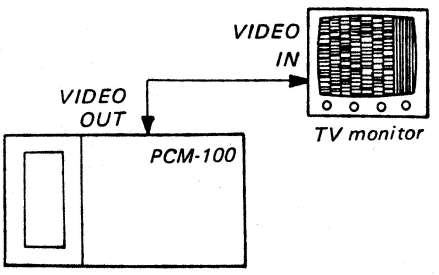
   jack. Specification: −10 ± 0.5 dBm
4. Push the REC MUT switch, and adjust VR508 (L-CH) and VR558 (R-CH) for the same level as that obtained in the procedure 3).

1-7. A/D CONVERSION OFFSET ADJUSTMENT (PCM-100)

1. Make sure that the PB-1, PB-2, digital REC, AD/DA, audio and digital I/O boards are plugged in the PCM unit.
2. Unplug the AD/DA board and connect it to the PCM unit by means of the extension board supplied from Sony.
3. Connect a TV monitor to the PCM unit as shown.
4. Wait a few minutes after the power switch is turned on.
5. Make the offset adjustment in the order, observing the TV monitor.
   1) Set the offset switch (S401) to the "connector" side. Adjust the offset adjustment resistor for IC26 (MP-2714) for the picture as shown in Fig. 7 on the monitor screen.
   2) After the adjustment, set the offset switch to the "dubbing switch" side.
   3) Short the terminal ⑨ of IC16 and the minus side of C56 with a lead wire. Adjust VR6 for the picture as shown in Fig. 7 on the monitor screen.
   4) After the adjustment, remove the lead wire used in the procedure (3).
   5) Short the jumper wires C to Cg, and D to Dg with lead wires to short the input of the low-pass filter. See Fig. 9.
   6) Adjust VR5 (L-CH) and VR4 (R-CH) for the picture as shown in Fig. 8 on the monitor screen.
   7) After the adjustment, remove the lead wires used in the procedure (6).

   Note: Refer to the mounting diagram for the adjustment parts location and the shorting position.

Connection Diagram for A/D conversion offset adjustment



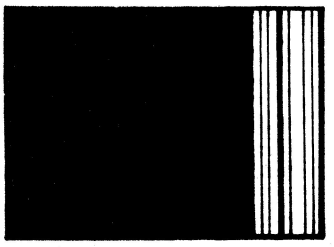


Fig. 7.

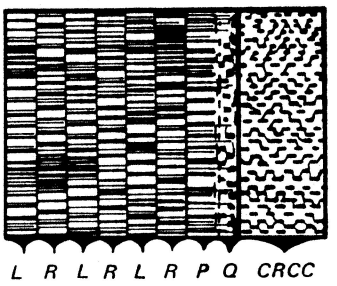


Fig. 8.

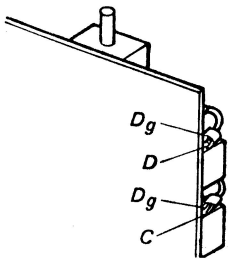


Fig. 9

1-8. D/A CONVERSION OFFSET ADJUSTMENT (PCM-100)

1. Make sure that the A/D conversion offset adjustment has been completed.
2. Connect the test equipment as shown in Fig. 10.
3. Set the offset switch (S401) to "connector" side.
4. Connect the digital voltmeter to the terminal ⑰ of IC25 (DAC71COB-V12) and adjust VR3 for a voltage of −0.3 to +0.3 mV dc (0 mV if possible) on the voltmeter.
5. Connect the digital voltmeter to the terminal ⑥ of IC2 and adjust VR1 for a voltage of −0.3 to +0.3 mV dc (0 mV if possible) on the voltmeter.
6. Connect the digital voltmeter to the terminal ⑥ of IC5 and adjust VR2 for a voltage of −0.3 to +0.3 mV dc (0 mV if possible) on the voltmeter.
7. After the adjustment, set the offset switch to "dubbing switch" side.

Connection Diagram for D/A conversion offset adjustment

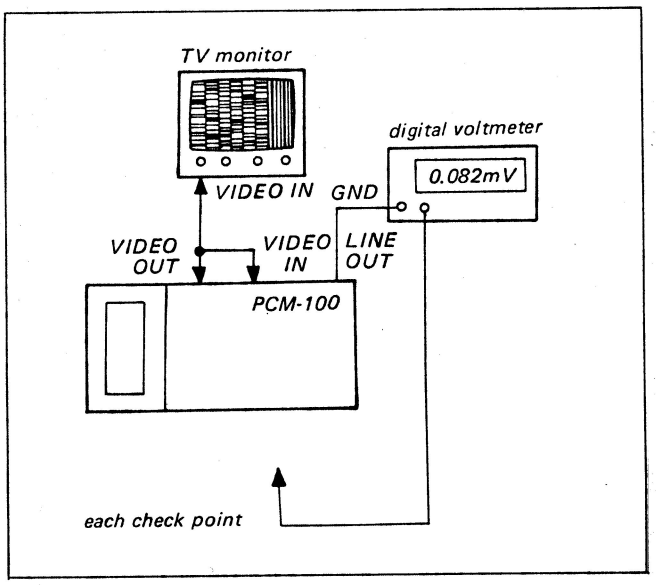


Fig. 10.

The minus lead of the voltmeter should be connected to the ground side of LINE OUT jack.

1-9. ANALOG-CIRCUIT OFFSET ADJUSTMENT (PCM-100)

1. Power Voltage Check
   1) Make sure that the PB-2, PB-1, digital REC, AD/DA, audio and digital I/O boards are plugged in the PCM unit.
   2) Unplug the audio board and connect it to the unit by means of the extension board supplied from Sony.
   3) Check the voltage at the terminals ② of IC601, IC610 (FS7815), and IC602, IC611 (FS7915).

Specification:	Power Voltage
IC601, IC610	+15V ± 0.6V
IC602, IC611	−15V ± 0.6V

2. Offset Adjustment (IN side)
   1) Connect the PCM unit, a TV monitor, and a digital voltmeter as shown in Fig. 11. Wait about five minutes after the power switch is turned on.
   2) Connect the digital voltmeter to the connector terminals ⑲ (L-CH) and ⑰ (R-CH) on the audio board.
   3) Turn the REC LEVEL control fully counterclockwise. Adjust VR502 (L-CH) and VR552 (R-CH) so that the digital voltmeter reads −0.3 to +0.3 mV (0 mV if possible).
   4) Turn the REC LEVEL control fully clockwise. Adjust VR501 (L-CH) and VR551 (R-CH) so that the digital voltmeter reads the same voltage as that obtained in the procedure 3).
   5) When turning the REC LEVEL control from fully-counterclockwise position to fully-clockwise position, the indication of the voltmeter does not change. If necessary, repeat the procedure 3) to 5).
   6) Connect the digital voltmeter to the terminals ② of IC506 (L-CH) and IC556 (R-CH). Adjust VR503 (L-CH) and VR553 (R-CH) so that the voltmerer reads −0.3 to +0.3 mV.

Connection Diagram for Analog circuit offset adjustment

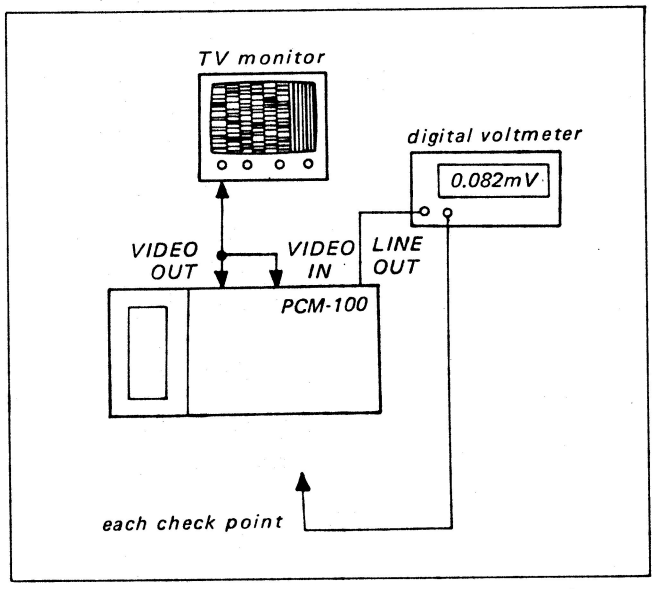


Fig. 11.

The minus lead of the voltmeter should be connected to the ground side of LINE OUT jack.

Note: Terminate CANNON IN connector with a 600 ohm resister.

1-10. OFFSET ADJUSTMENT (OUT SIDE)

Note: Make sure that the offset adjustment for the AD/DA board has been completed.

1. Connect the test equipment as shown in Fig. 11.
2. Connect the digital voltmeter to the terminals ㉓, ㉔, ㉕ and ㉖ of the connector on the audio board.
3. Adjust the each adjustable resistor for a voltage of −1 to +1 mV (offset voltage) on the voltmeter.

terminal of connector	adjustable resistor
No. 25 (L-CH, L)	VR504
No. 26 (L-CH, H)	VR505
No. 23 (R-CH, L)	VR554
No. 24 (R-CH, H)	VR555

1-11. DITHER LEVEL ADJUSTMENT (PCM-100)

Settings: Emphasis switch; OFF
REC LEVEL control; minimum
LINE IN jack; terminate 600 ohm

1. Prepare a low-pass filter as shown in Fig. 6.
2. Check the dither level at the terminals ⑲ (L-CH) and ⑰ (R-CH) of the connector on the audio board.
   Specification: −80 dBm (through a low-pass filter)
3. If the specification is not met, turn VR508 (L-CH) and VR558 (R-CH).

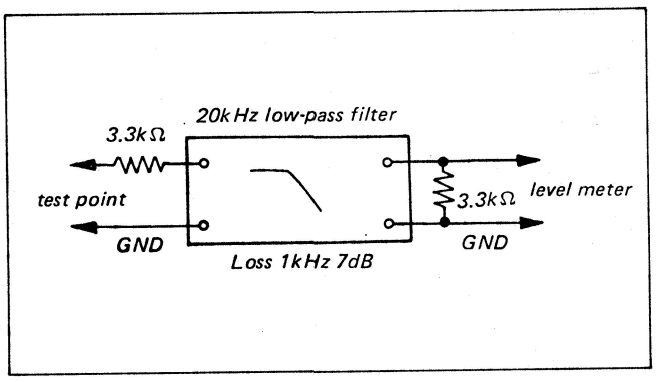
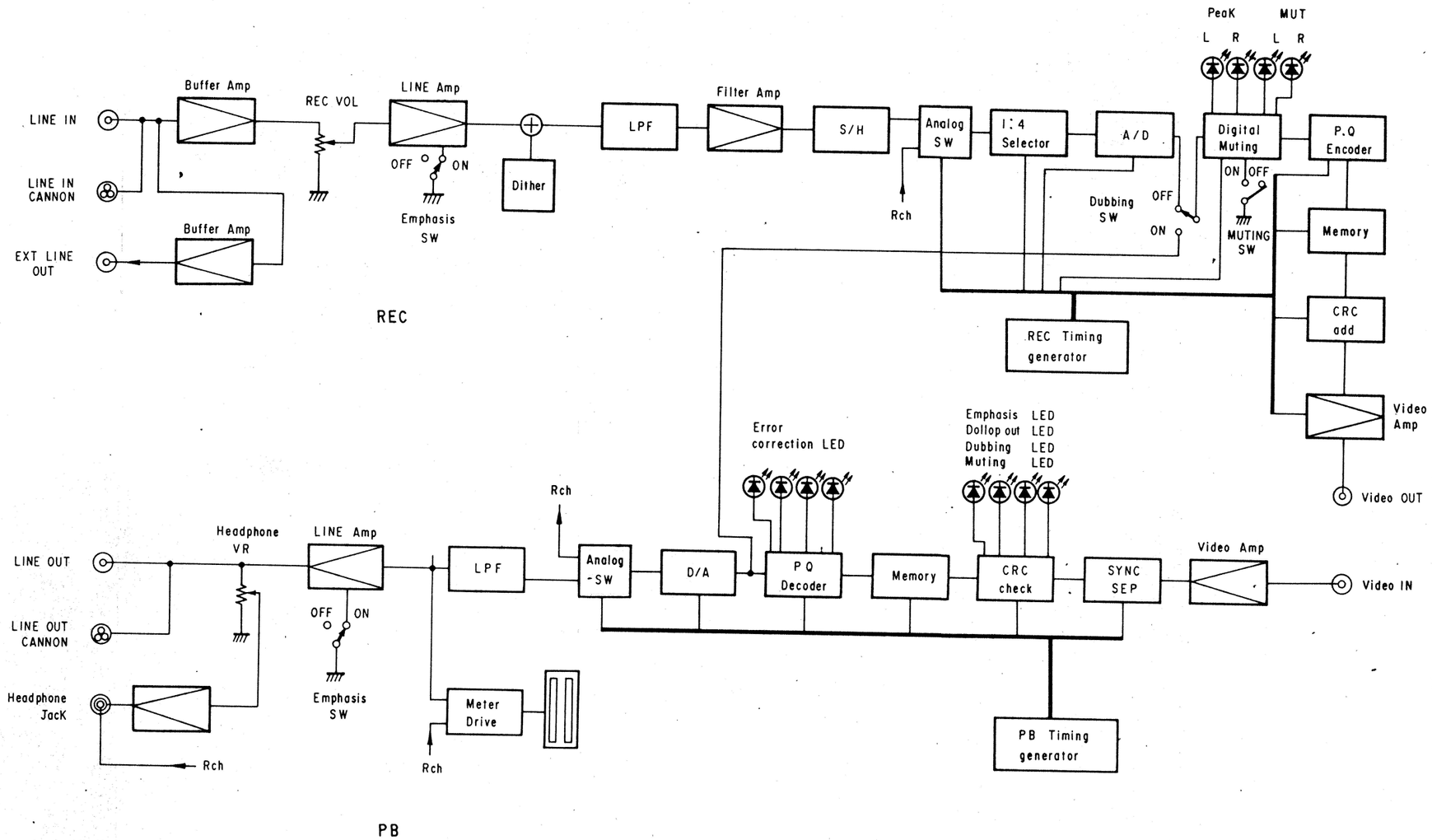


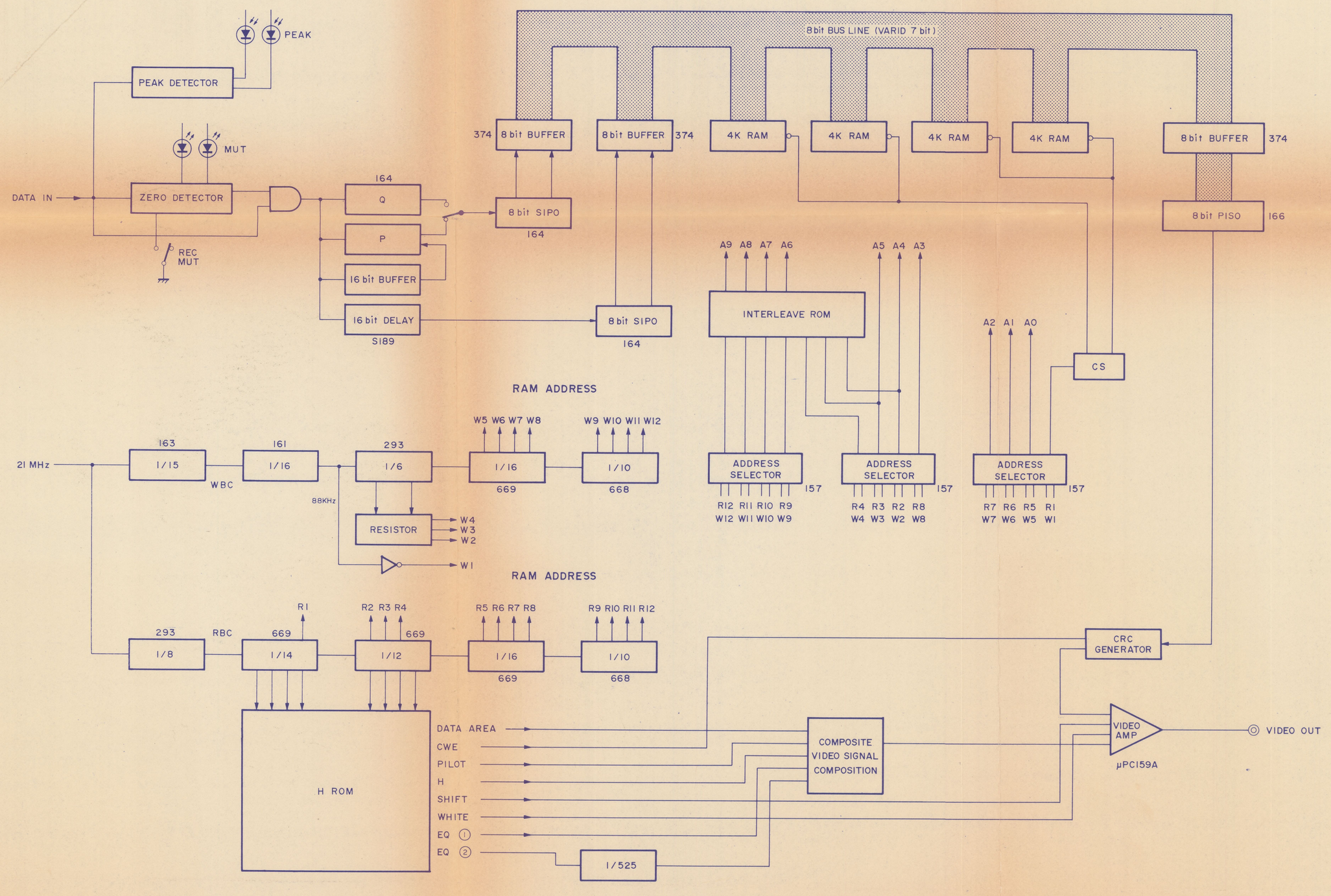
Fig. 12

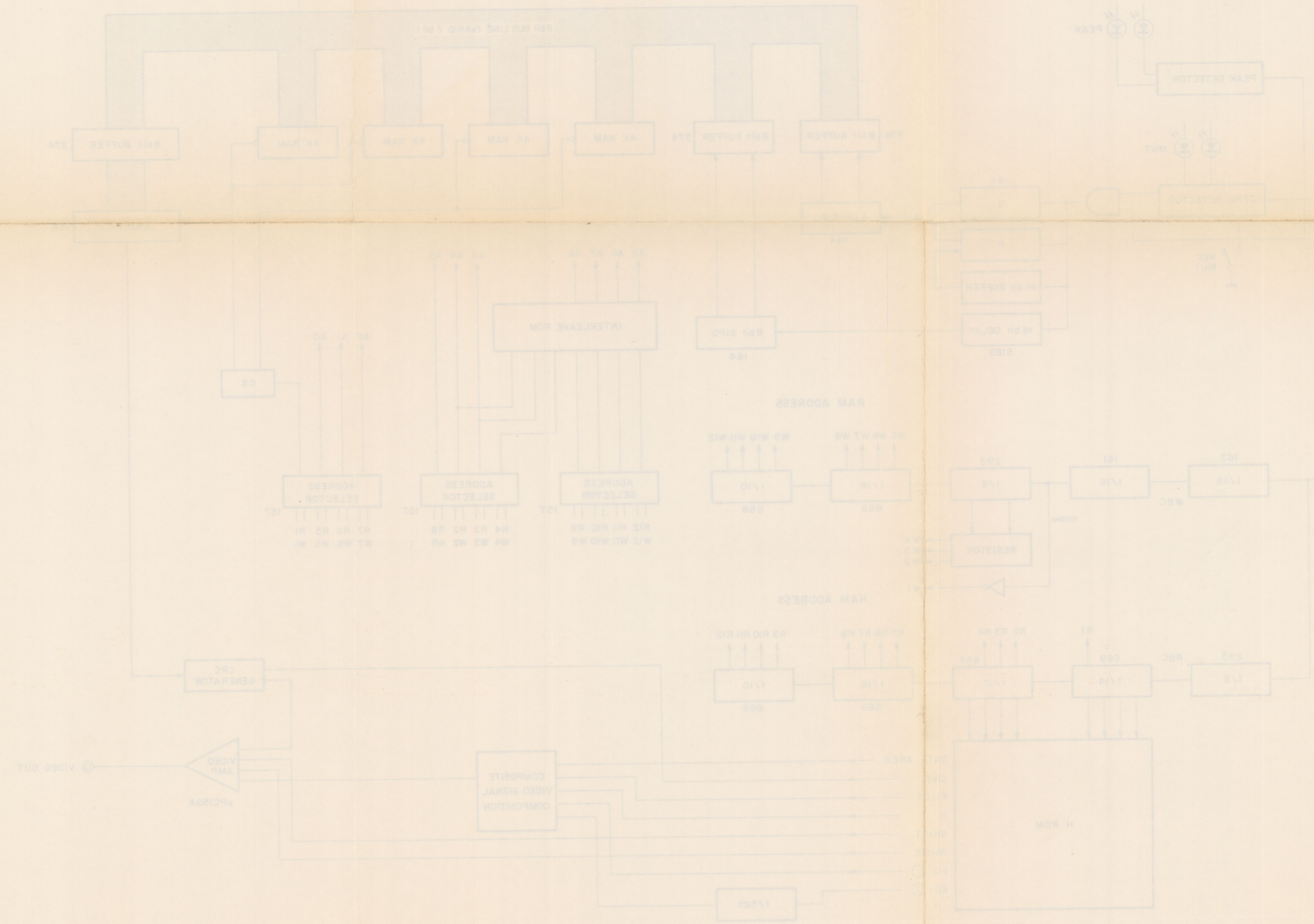
SECTION 2
BLOCK DIAGRAM

TOTAL BLOCK DIAGRAM (PCM-10)

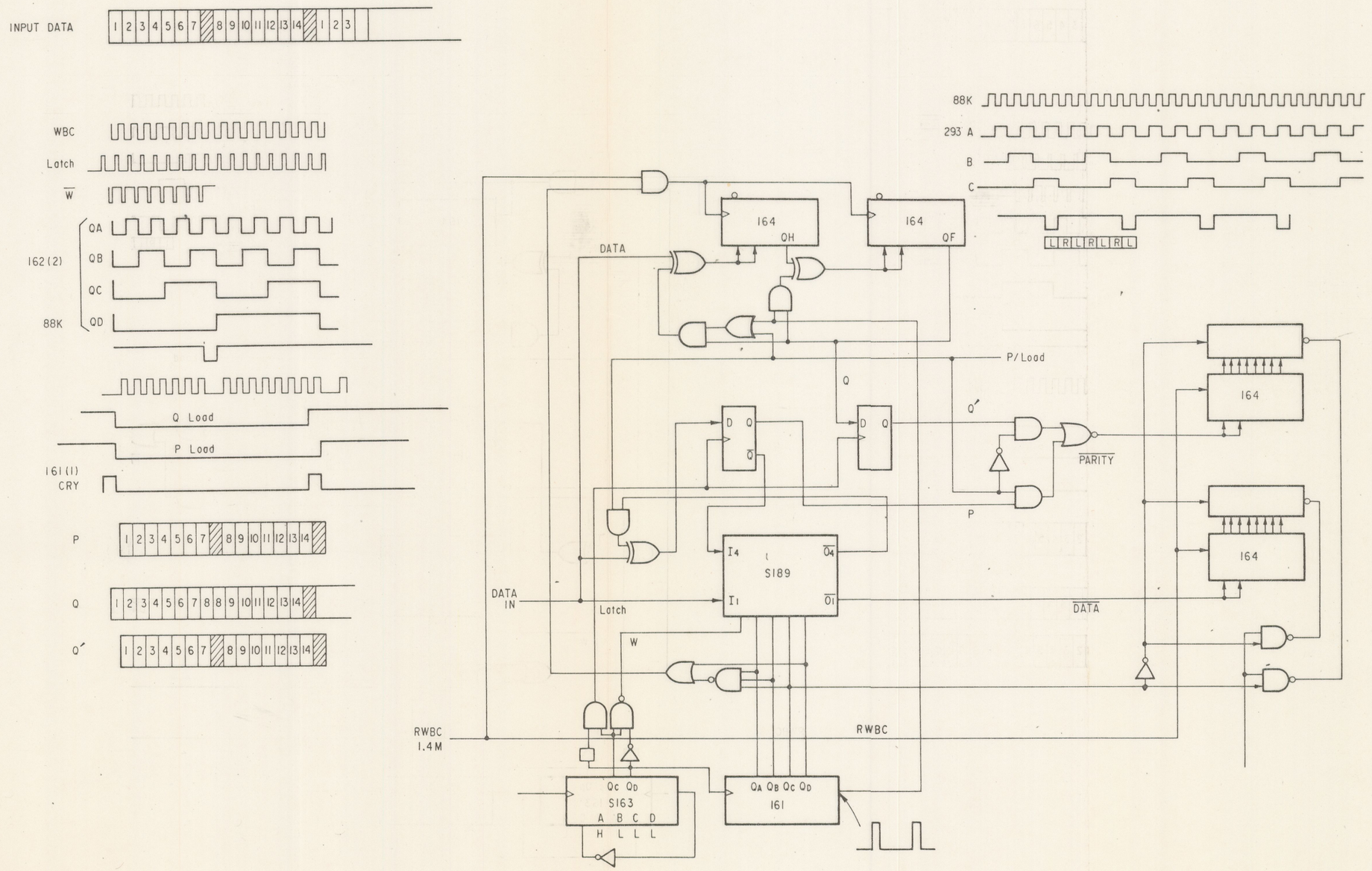


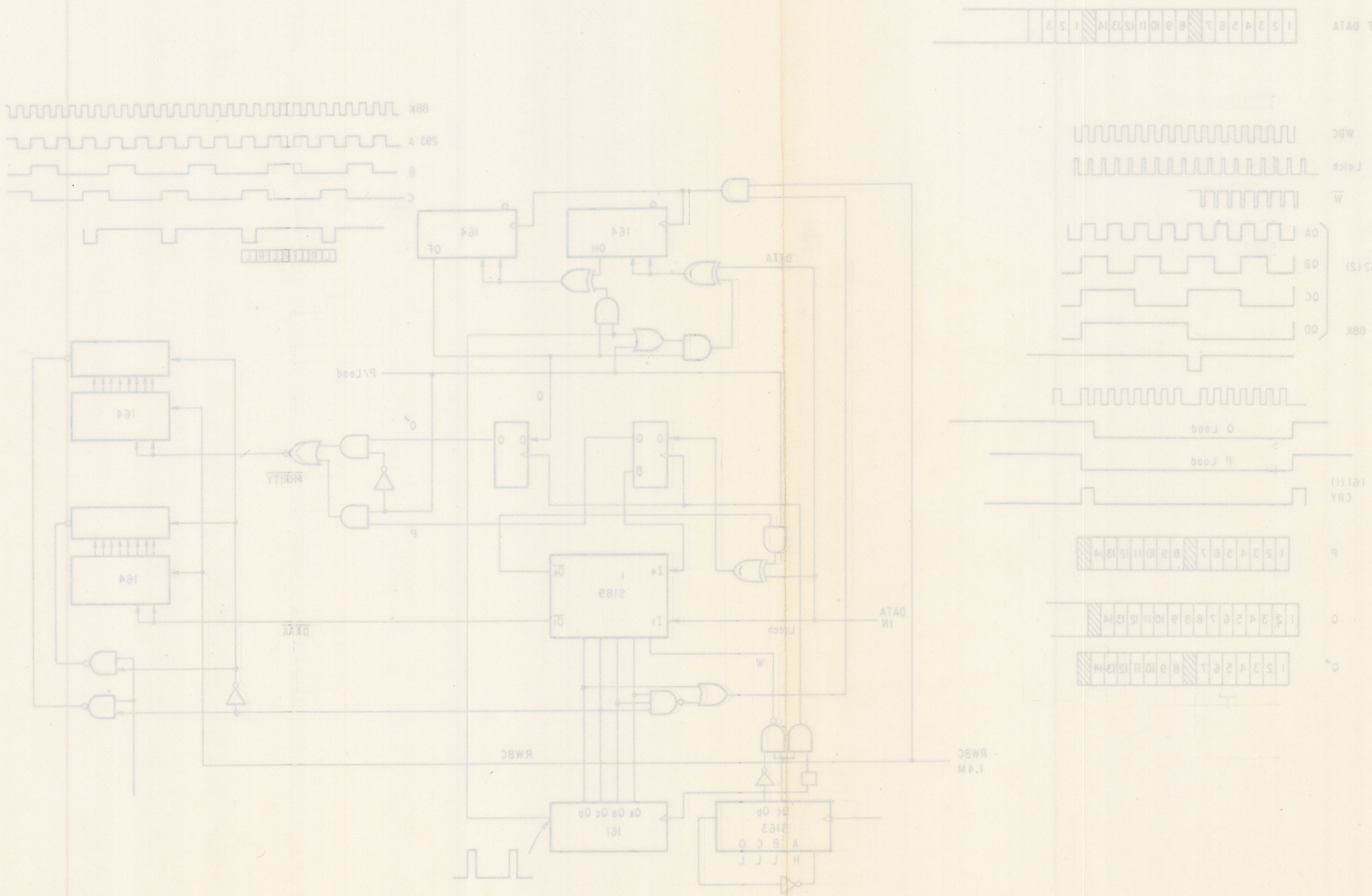
REC BLOCK DIAGRAM (REC UNIT)

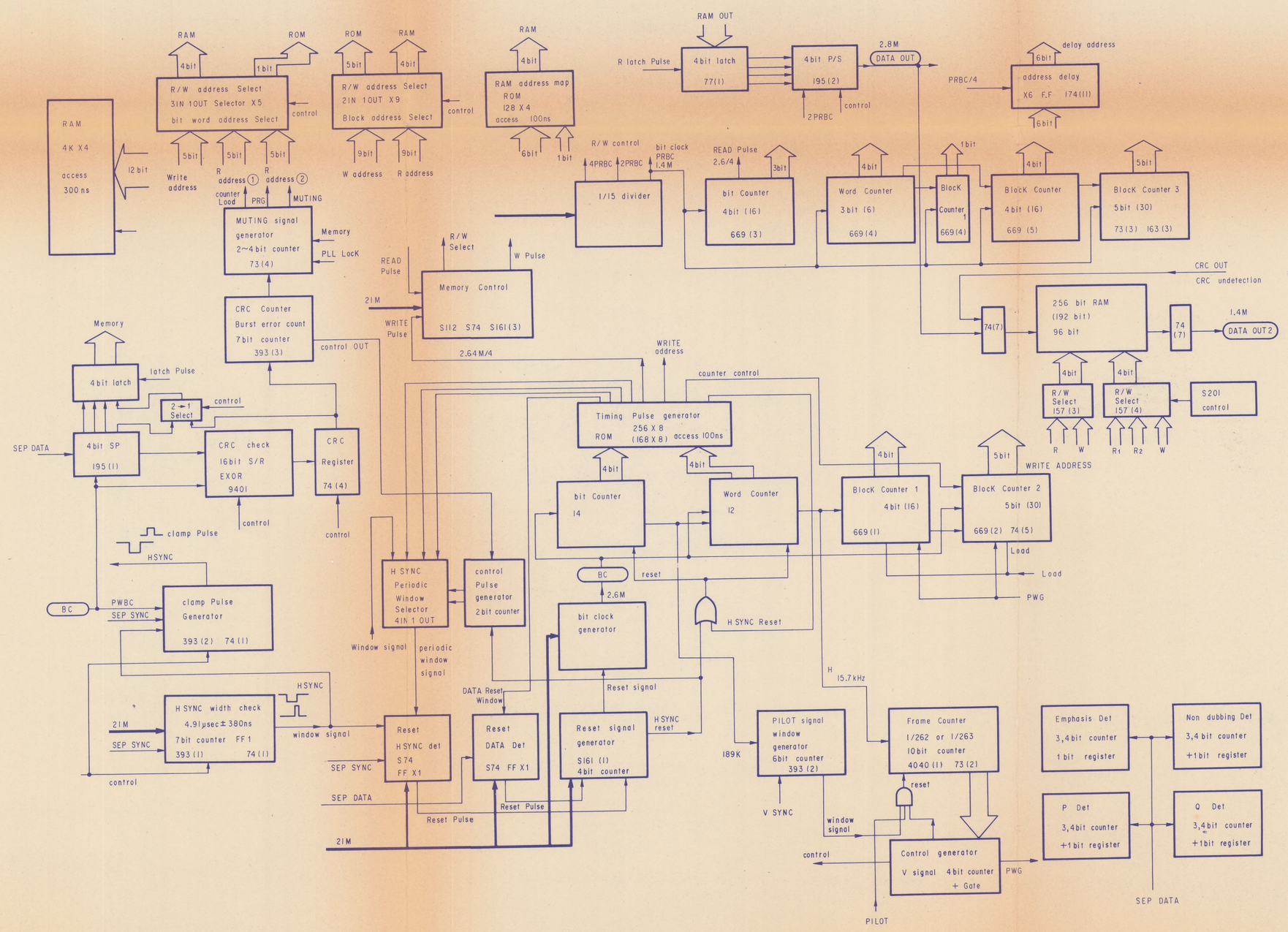



8bit BUS LINE (VARID 7 bit)
8bit BUFFER
4K RAM
4K RAM
4K RAM
4K RAM
8bit BUFFER
8bit BUFFER
INTERLEAVE ROM
8bit SIPO
CS
ADDRESS SELECTOR
ADDRESS SELECTOR
ADDRESS SELECTOR
RAM ADDRESS
RAM ADDRESS
CRC GENERATOR
VIDEO AMP
VIDEO OUT
COMPOSITE VIDEO SIGNAL COMPOSITION
PEAK DETECTOR
PEAK
MUT
ZERO DETECTOR
DATA IN
16bit BUFFER
16bit DELAY
REGISTOR
H ROM
AREA

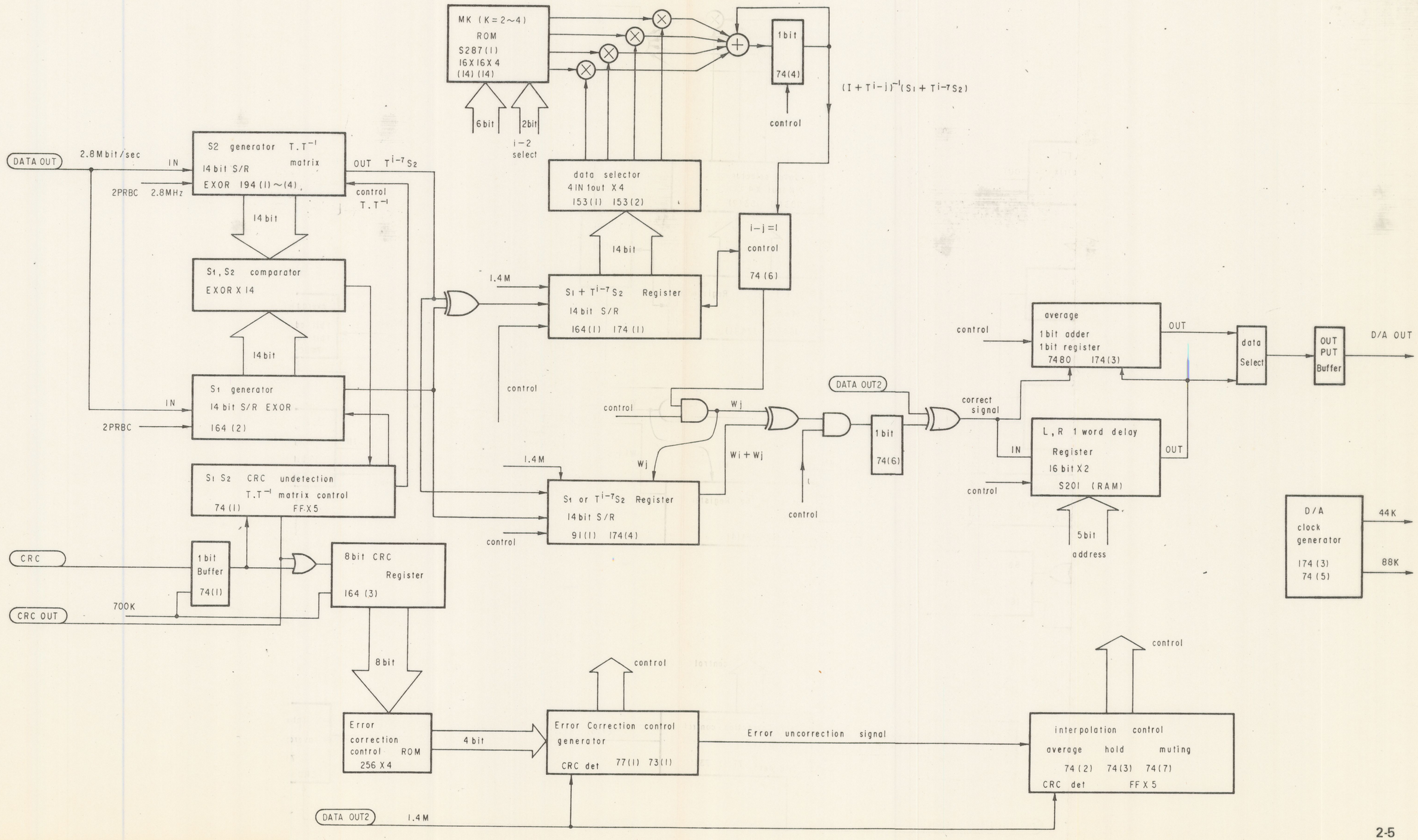
P/Q GENERATOR (REC UNIT)

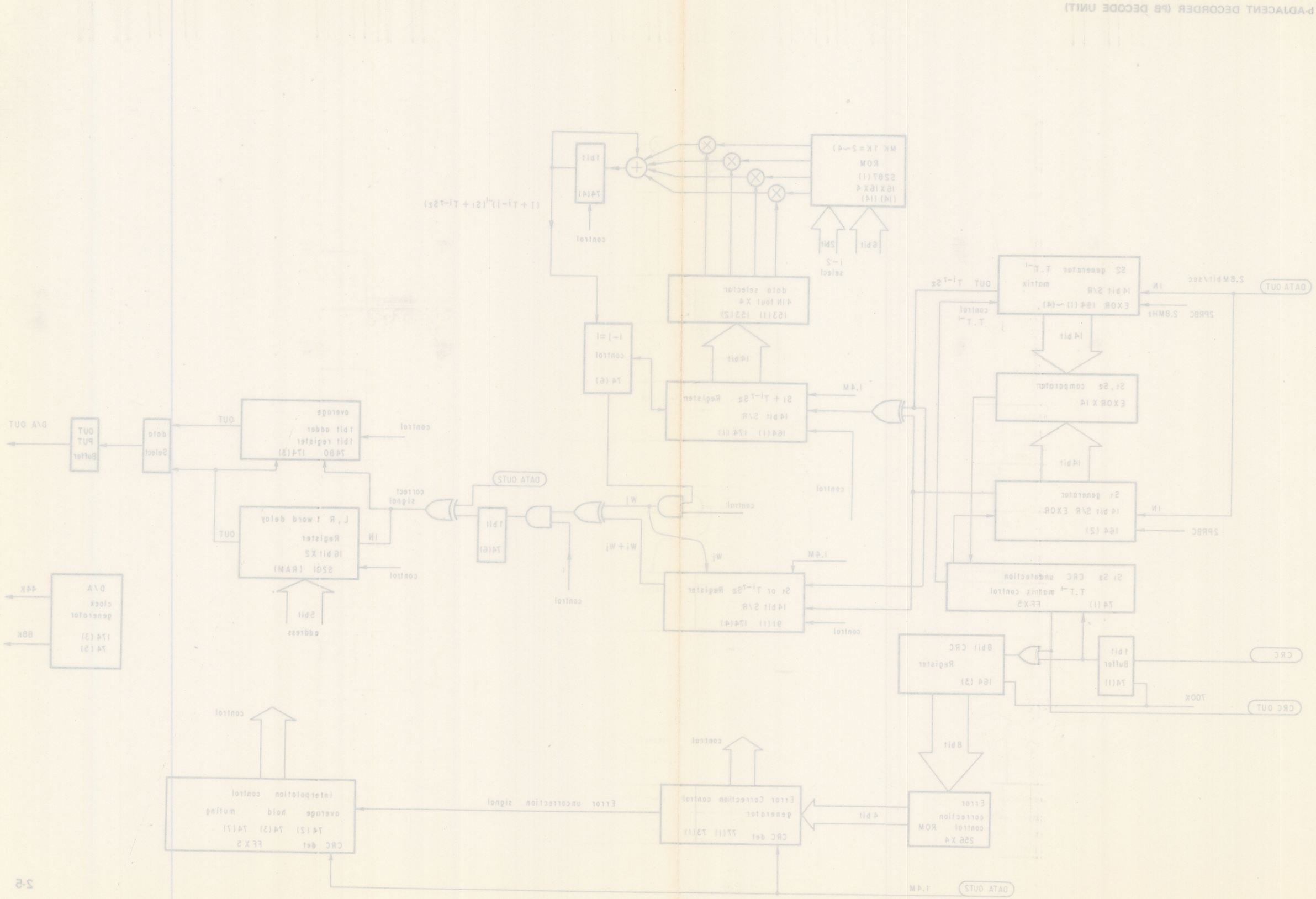



P/O GENERATOR (REC UNIT)
INPUT DATA
WBC
Latch
W
QA
QB
QC
QD
16 2(2)
88X
Q Load
P Load
16 1(1)
CRY
P
Q
Q'
88X
293 A
B
C
164
QF
QH
DETA
P Load
Q
Q'
PARITY
P
DATA
Latch
W
RWBC
RWBC
1.44M
QA QB QC QD
161
QC QD
A B C D
H L L L
316 3

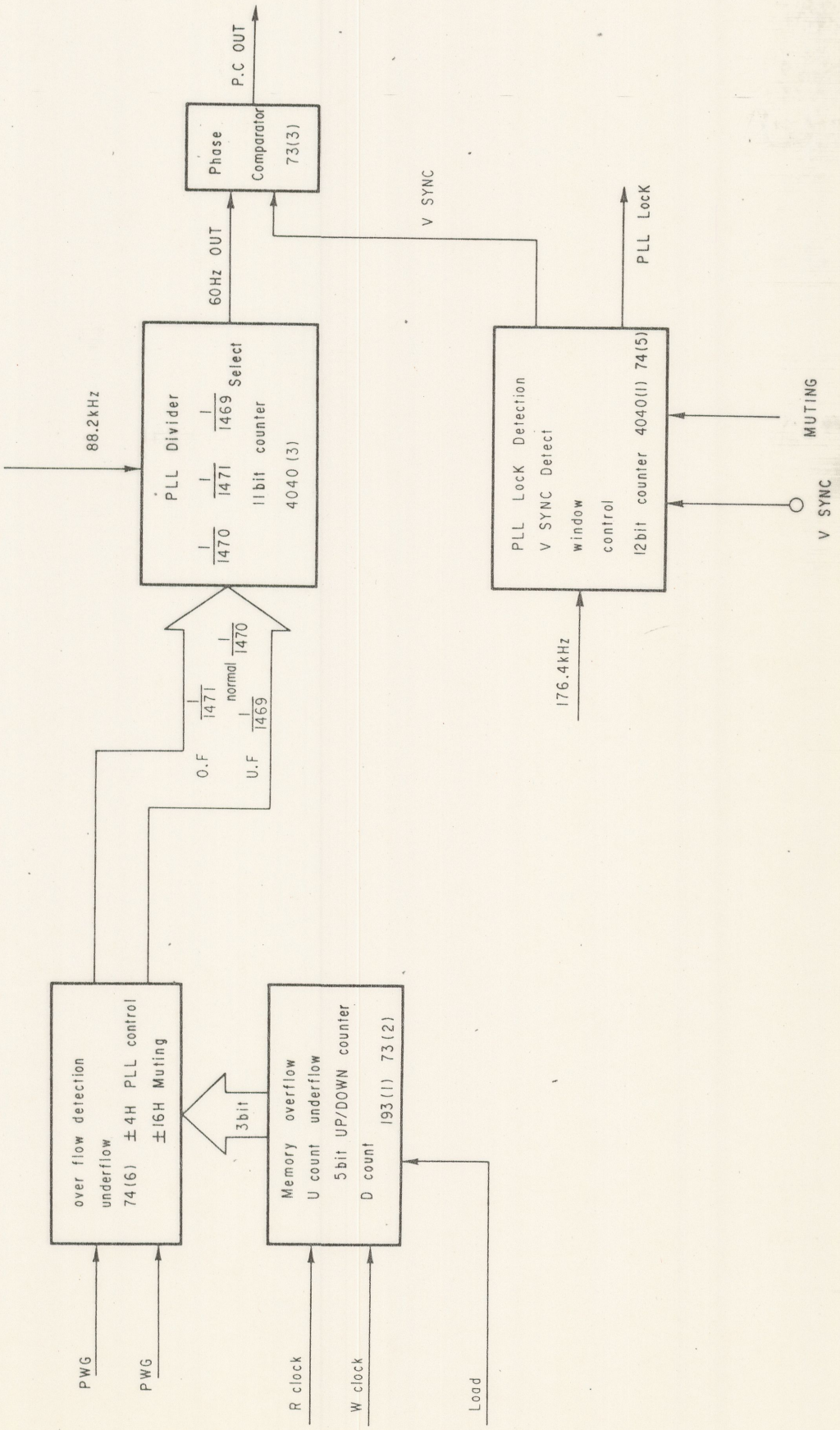

RAM
4K X4
access
300 ns
12 bit
RAM
4bit
ROM
1bit
R/W address Select
3IN 1OUT Selector X5
bit word address Select
control
5bit
5bit
5bit
Write address
R address ①
R address ②
counter Load
PRG
MUTING
ROM
5bit
RAM
4bit
R/W address Select
2IN 1OUT X9
Block address Select
control
9bit
9bit
W address
R address
RAM
4bit
RAM address map
ROM
128 X4
access 100ns
6bit
1bit
MUTING signal generator
2~4 bit counter
73(4)
Memory
PLL Lock
CRC Counter
Burst error count
7bit counter
393(3)
control OUT
Memory
4bit latch
latch Pulse
2→1 Select
control
SEP DATA
4bit SP
195(1)
CRC check
16bit S/R
EXOR
9401
control
CRC Register
74(4)
control
clamp Pulse
HSYNC
BC
PWBC
SEP SYNC
clamp Pulse Generator
393(2) 74(1)
H SYNC width check
4.91μsec±380ns
7bit counter FF1
393(1) 74(1)
21M
SEP SYNC
HSYNC
window signal
control
R/W Select
W Pulse
READ Pulse
Memory Control
S112 S74 S161(3)
21M
WRITE Pulse
2.64M/4
WRITE address
counter control
H SYNC Periodic Window Selector
4IN 1 OUT
control Pulse generator
2bit counter
Window signal
periodic window signal
DATA Reset Window
Reset
H SYNC det
S74 FF X1
Reset
DATA Det
S74 FF X1
Reset signal generator
S161(1)
4bit counter
H SYNC reset
SEP SYNC
SEP DATA
Reset Pulse
Reset Pulse
21M
Timing Pulse generator
ROM 256 X 8
(168 X 8) access 100ns
4bit
4bit
bit Counter
14
Word Counter
12
BC
reset
2.6M
bit clock generator
H SYNC Reset
Reset signal
H
15.7kHz
RAM OUT
R latch Pulse
4bit latch
77(1)
4bit P/S
195(2)
2.8M
DATA OUT
2PRBC
control
PRBC/4
delay address
6bit
address delay
X6 F.F 174(11)
6bit
R/W control
4PRBC
2PRBC
bit clock
PRBC
1.4M
READ Pulse
2.6/4
3bit
bit Counter
4bit (16)
669(3)
4bit
Word Counter
3bit (6)
669(4)
1bit
Block Counter 1
669(4)
4bit
Block Counter
4bit (16)
669(5)
5bit
Block Counter 3
5bit (30)
73(3) 163(3)
CRC OUT
CRC undetection
74(7)
256 bit RAM
(192 bit)
96 bit
74(7)
1.4M
DATA OUT 2
4bit
R/W Select
157(3)
4bit
R/W Select
157(4)
S201 control
R W
R1 R2 W
WRITE ADDRESS
4bit
Block Counter 1
4bit (16)
669(1)
5bit
Block Counter 2
5bit (30)
669(2) 74(5)
Load
Load
PWG
PILOT signal window generator
6bit counter
393(2)
189K
V SYNC
window signal
control
PILOT
Frame Counter
1/262 or 1/263
10bit counter
4040(1) 73(2)
reset
Control generator
V signal 4bit counter
+ Gate
PWG
Emphasis Det
3,4bit counter
1bit register
Non dubbing Det
3,4bit counter
+1bit register
P Det
3,4bit counter
+1bit register
Q Det
3,4bit counter
+1bit register
SEP DATA

b-ADJACENT DECORDER (PB DECODE UNIT)



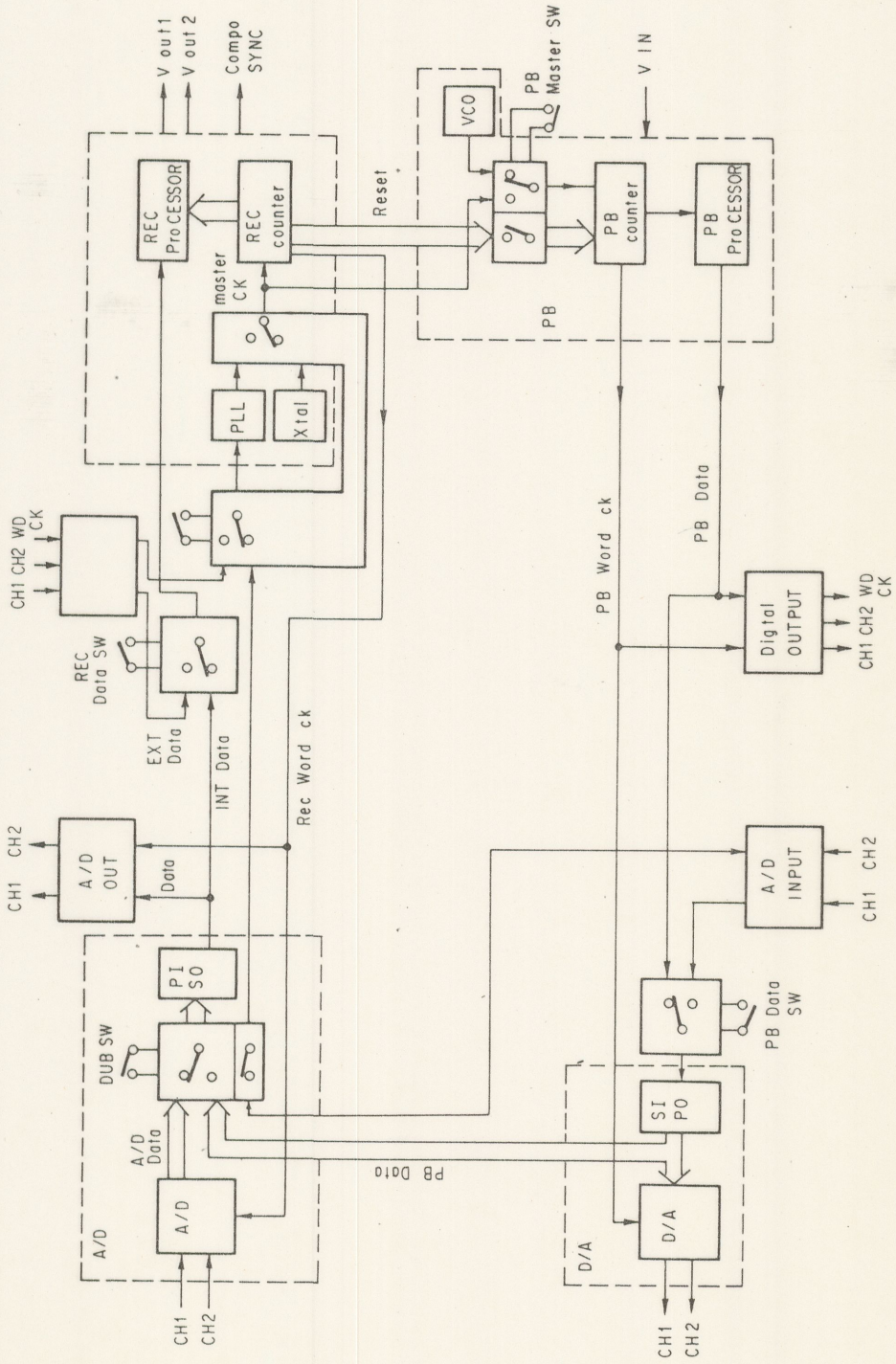

DATA OUT
2.8Mbit/sec
IN
2PRBC 2.8MHz
14bit
control
CRC
CRC OUT
700K
8bit
4bit
1.4M
DATA OUT
control
correct signal
OUT
IN
address
5bit
44K
88K
D/A OUT
control

PLL BLOCK (PB DECODE UNIT)



PLL BLOCK (PB DECODE UNIT)

DIGITAL I/O BLOCK DIAGRAM (DIGITAL I/O UNIT)

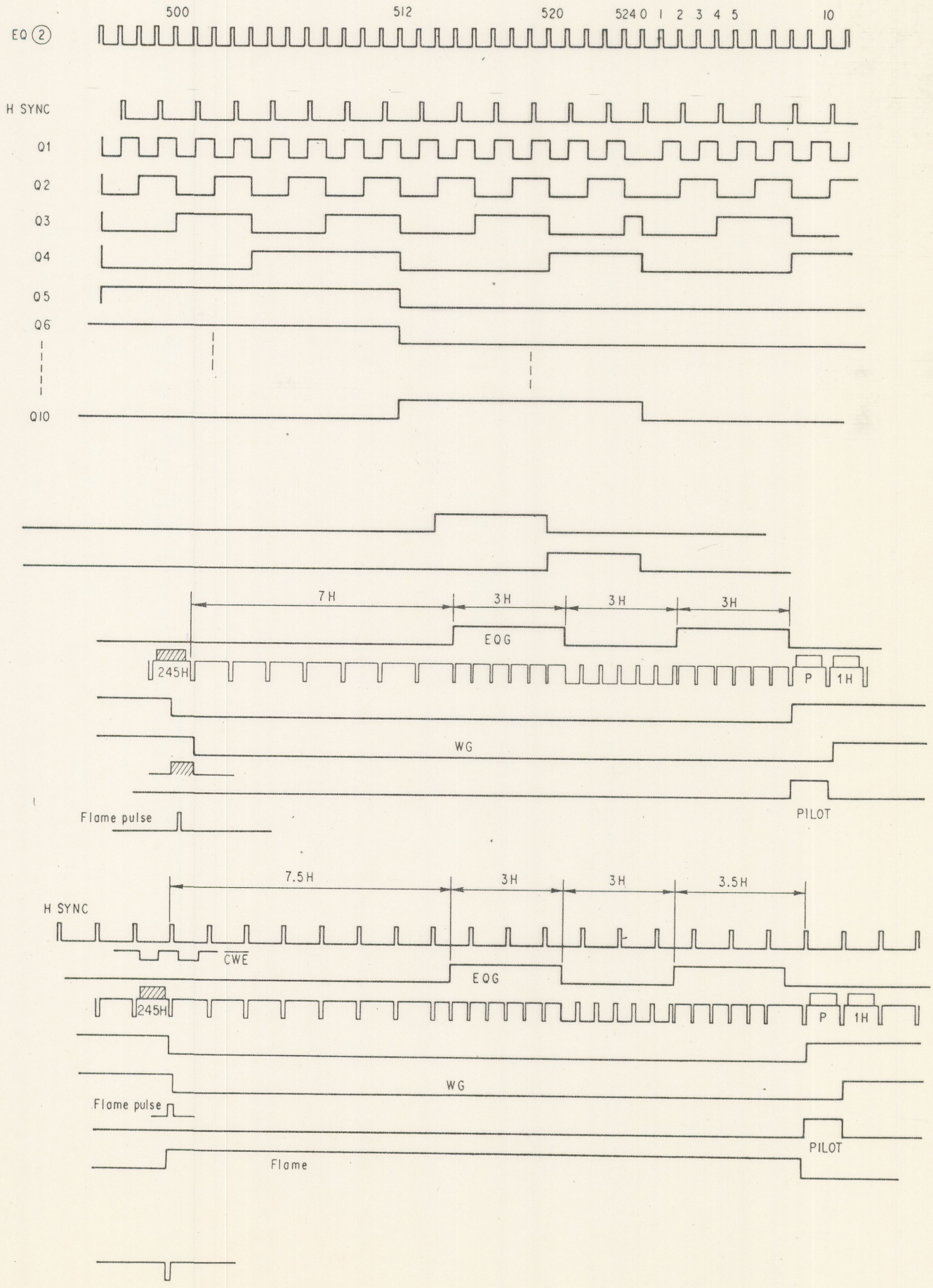


DIGITAL I/O BLOCK DIAGRAM (DIGITAL I/O UNIT)

CH1
CH2
D/A
D/A
D/A

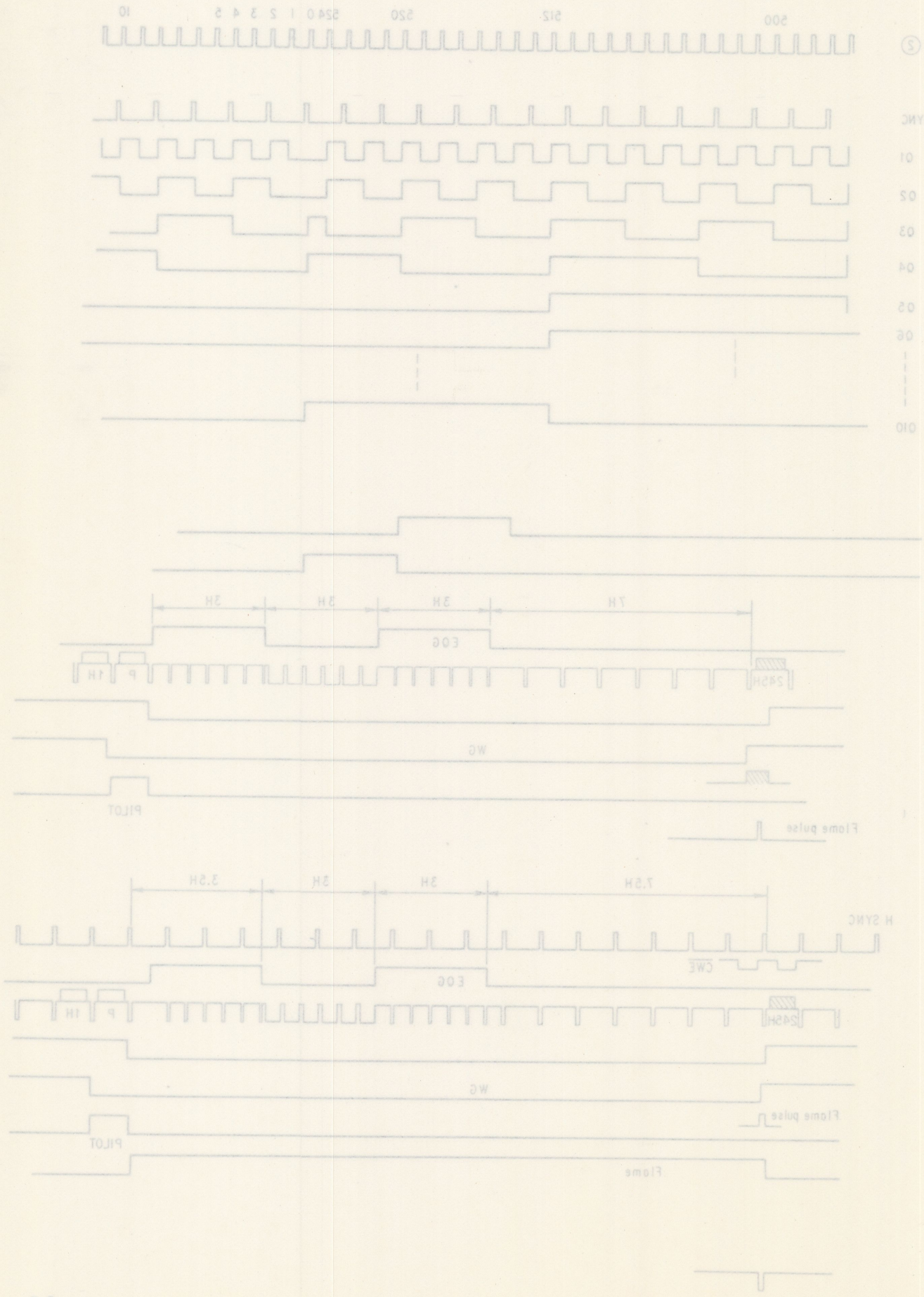
SECTION 3
TIMING CHART

REC V TIMING (REC UNIT)

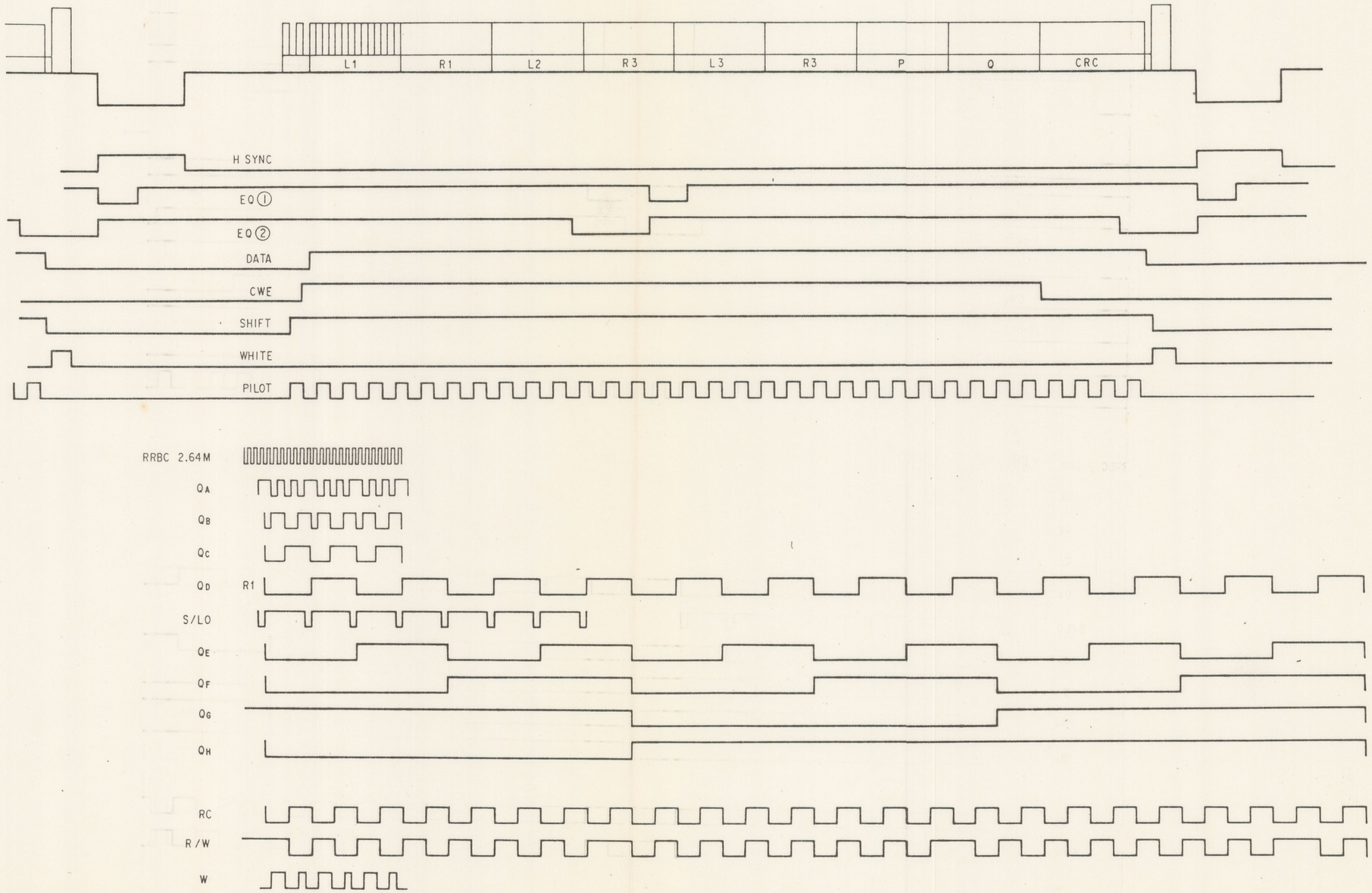


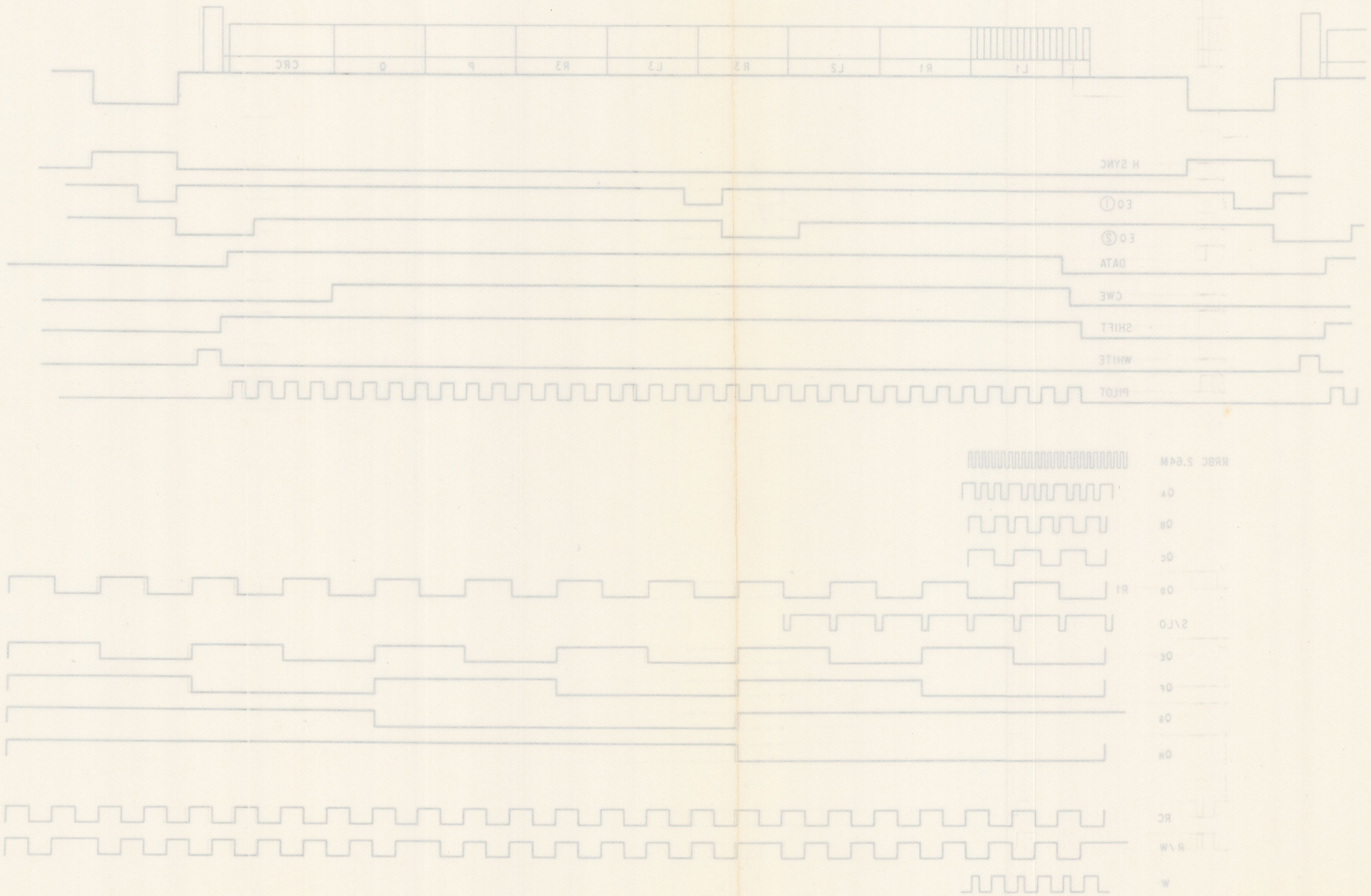
SECTION 3
TIMING CHART

REC V TIMING (REC UNIT)

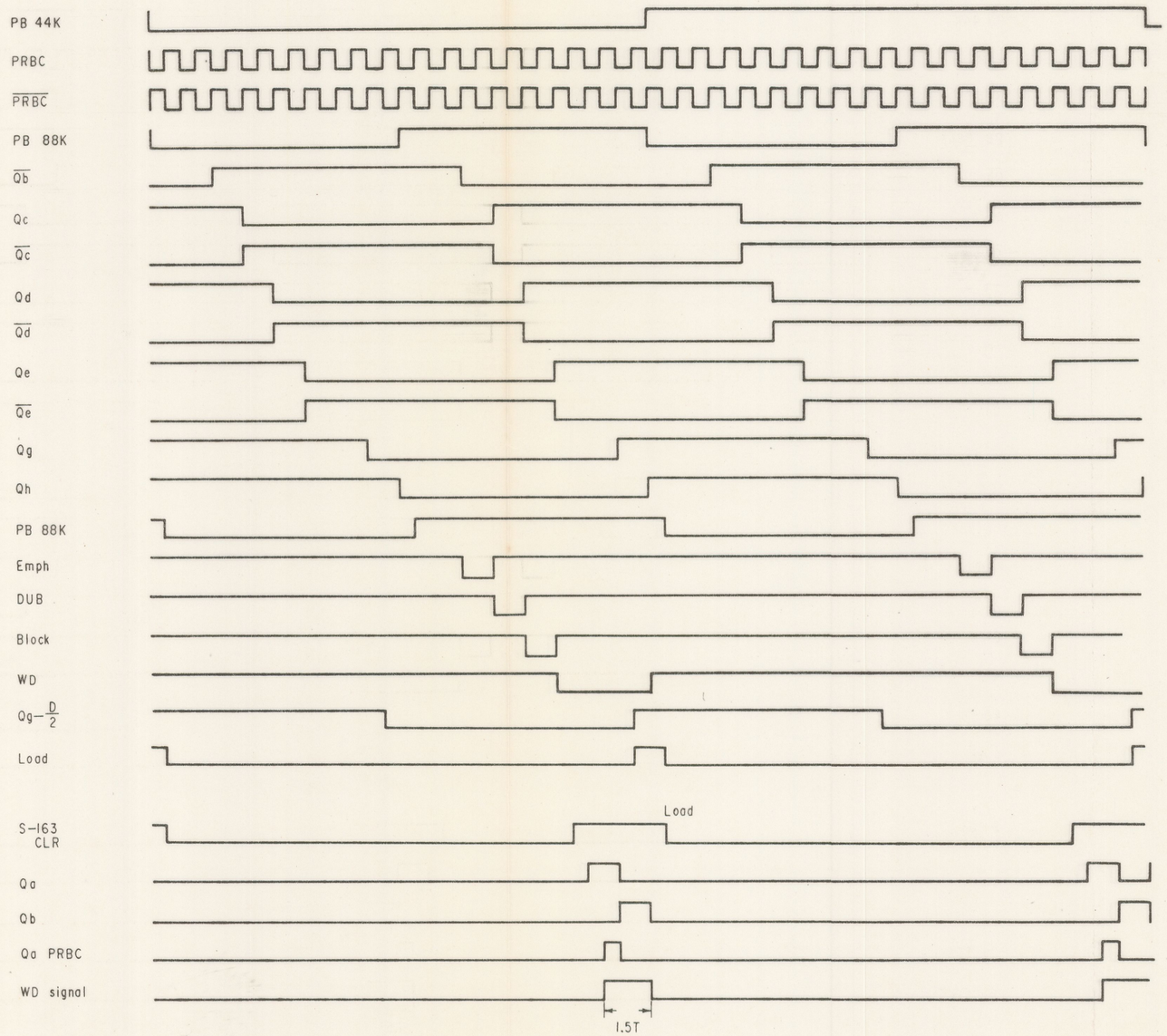


REC H TIMING (REC UNIT)



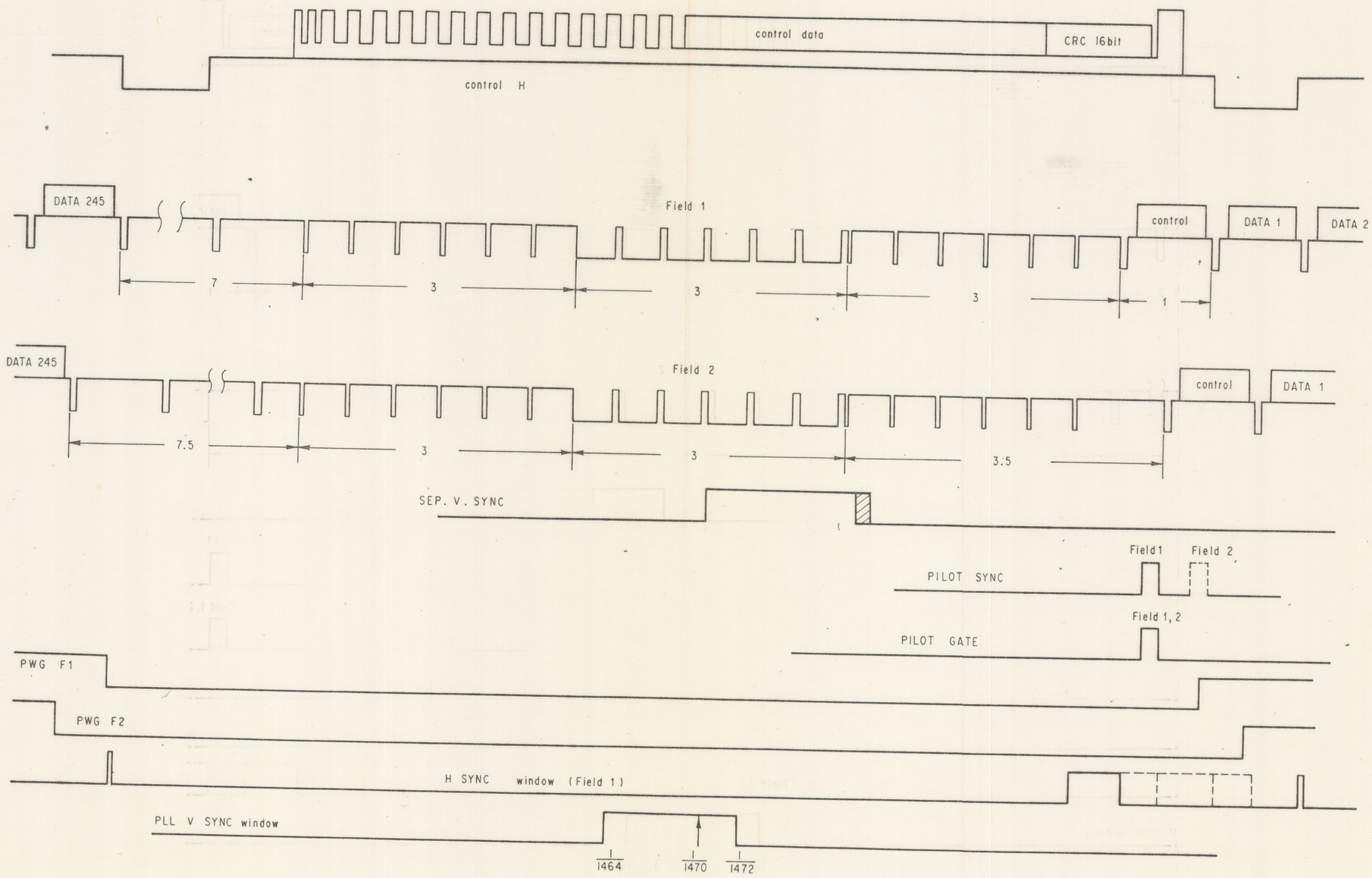

CRC
0
P
R3
L3
R2
L2
R1
L1
H SYNC
E0 (1)
E0 (S)
DATA
CWE
SHIFT
WHITE
PILOT
RREC 2.64M
0a
0b
0c
0d
R1
S/LO
0e
0f
0g
0h
RC
R/W
W

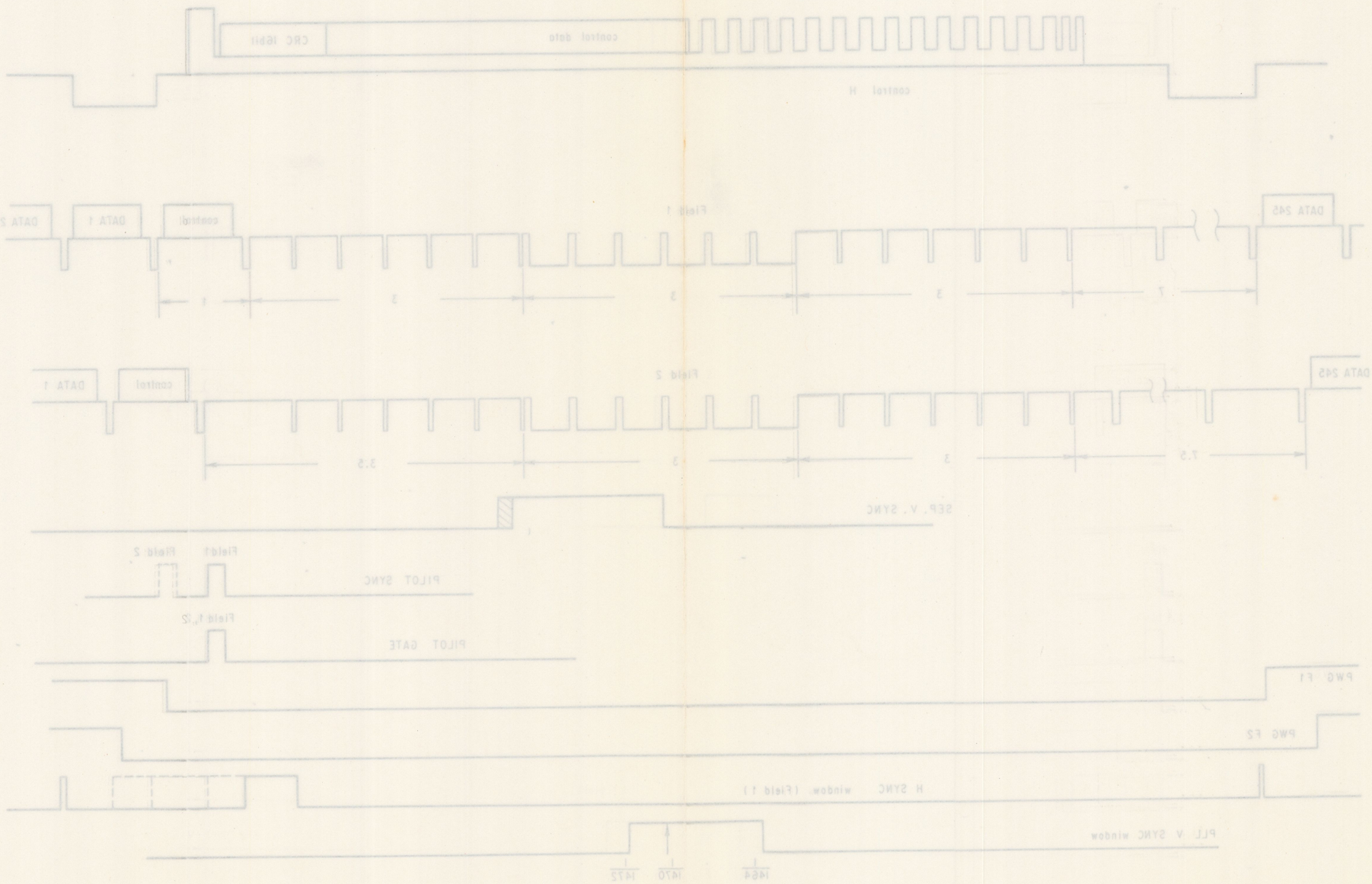
REC OUT CONTROL DATA TIMING (REC UNIT)



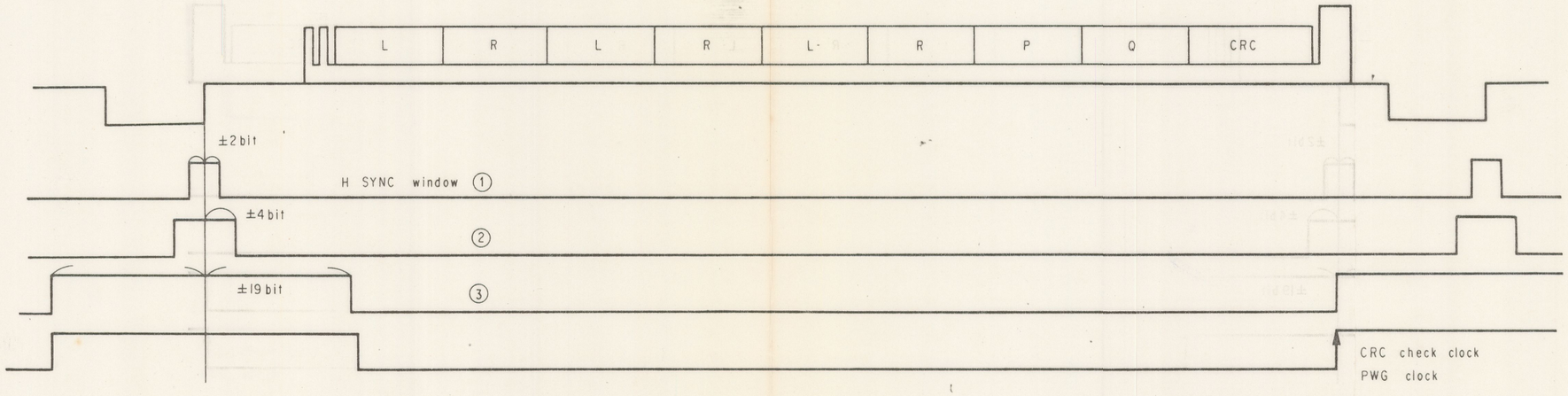
PB 44K
PRBC
$\overline{PRBC}$
PB 88K
$\overline{Qb}$
Qc
$\overline{Qc}$
Qd
$\overline{Qd}$
Qe
$\overline{Qe}$
Qh
PB 88K
Emph
DUB
Block
WD
$Qg-\frac{D}{2}$
Load
Load
S-163
CLR
Qa
Qb
Qa PRBC
WD signal
1.5T

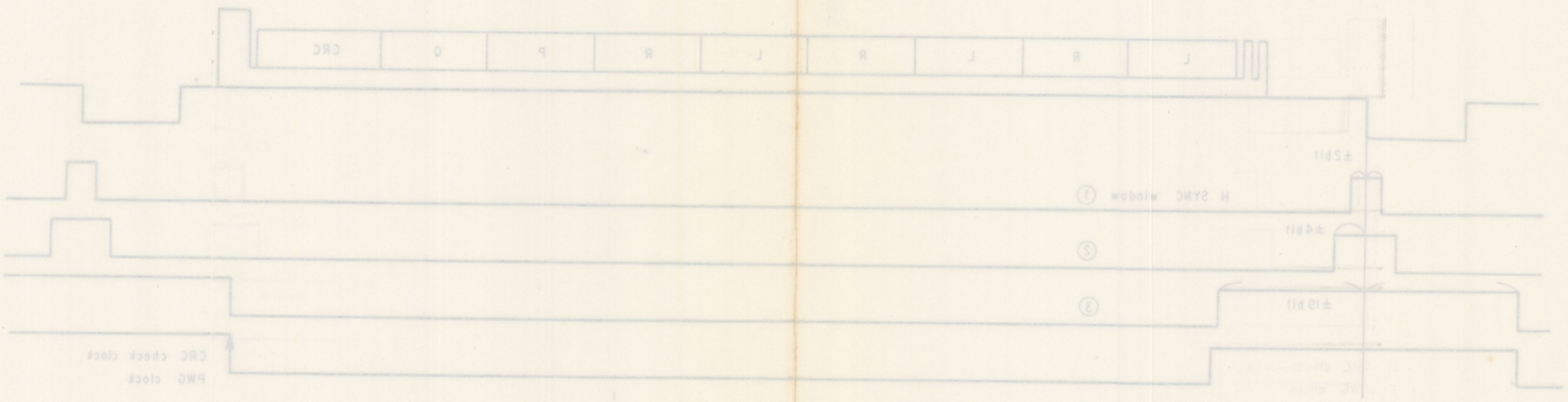
PB TIMING (PB CONTROL UNIT)



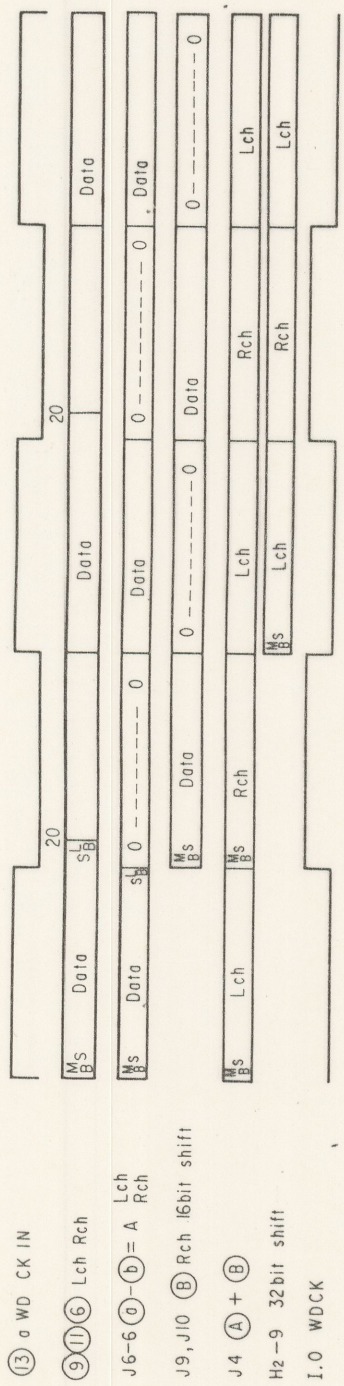

control H
CRC 16bit
control data
DATA 2
DATA 1
control
Field 1
DATA 245
1
3
3
3
7
DATA 1
control
Field 2
DATA 245
3.5
3
3
7.5
SEP. V. SYNC
Field 2
Field 1
PILOT SYNC
Field 1,2
PILOT GATE
PWG F1
PWG F2
H SYNC window (Field 1)
PLL V SYNC window
1422
1470
1464

PB H SYNC WINDOW (PB CONTROL UNIT)



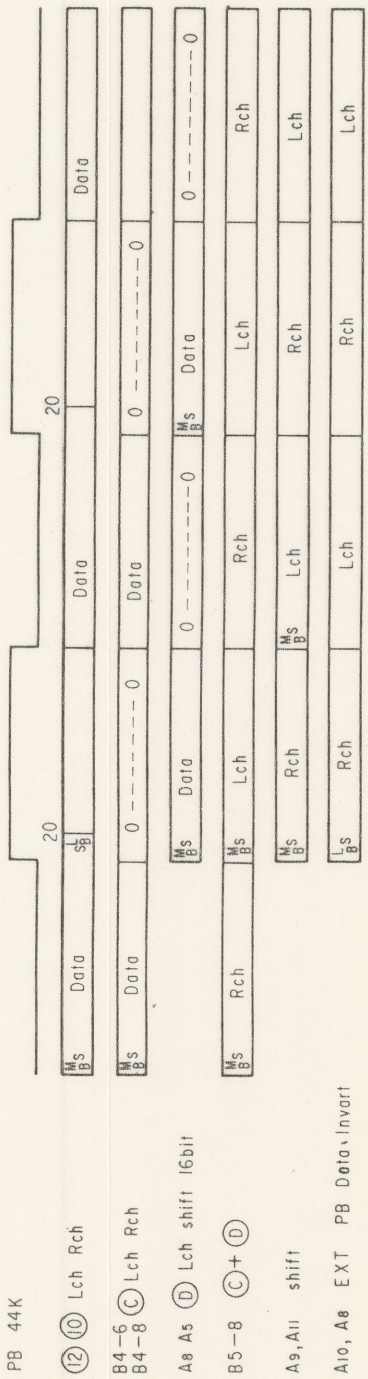

CRC
0
P
R
L
R
L
R
L
±2bit
① H SYNC window
±4bit
②
±19bit
③
CRC check clock
PWG clock

REC IN DATA TIMING (DIGITAL I/O UNIT)



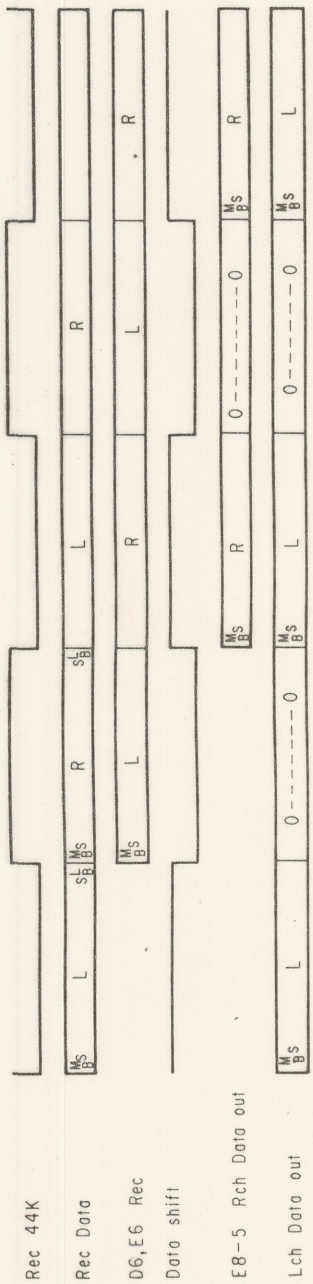
REC IN DATA TIMING (DIGITAL I/O UNIT)
MD CK DM 0
Data
Lch
Rch
Lch
Rch
Lch
Rch

D/A IN DATA TIMING (DIGITAL I/O UNIT)



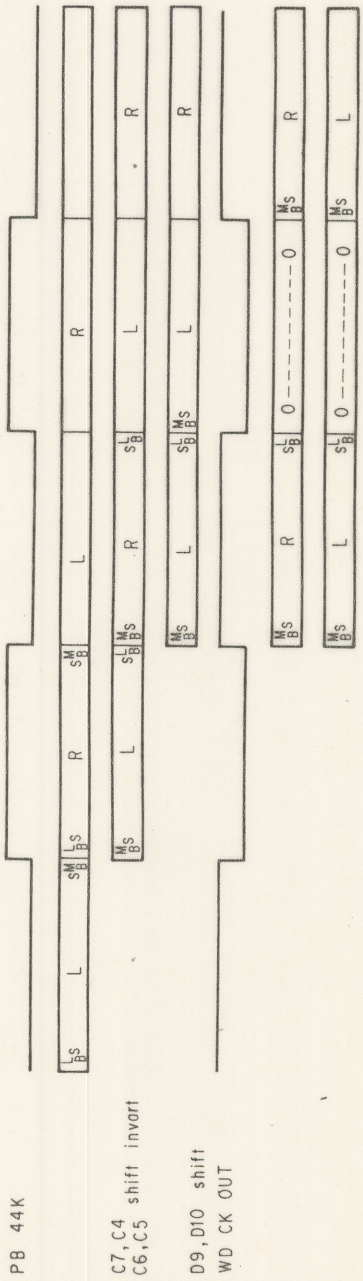
D/A IN DATA TIMING (DIGITAL I/O UNIT)

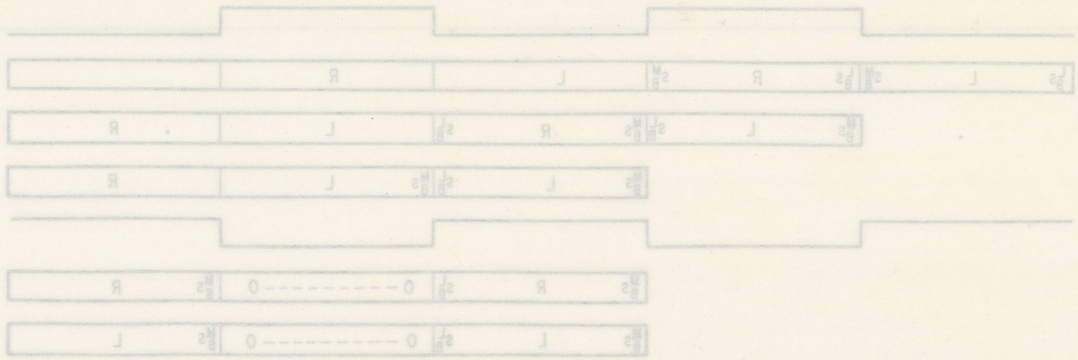
A/D OUT DATA TIMING (DIGITAL I/O UNIT)



A/D OUT DATA TIMING (DIGITAL I/O UNIT)

REC OUT DATA TIMING (DIGITAL I/O UNIT)

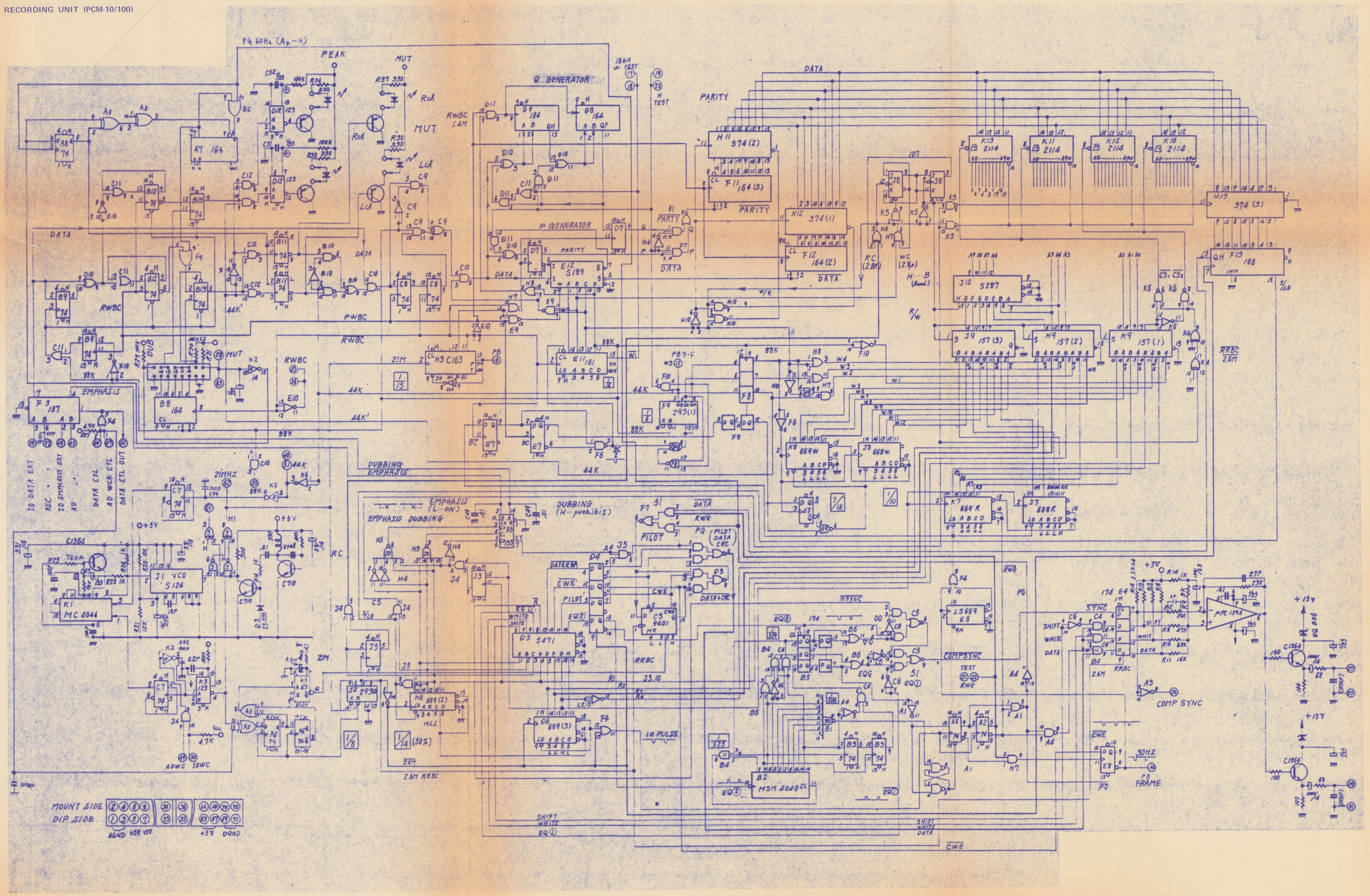


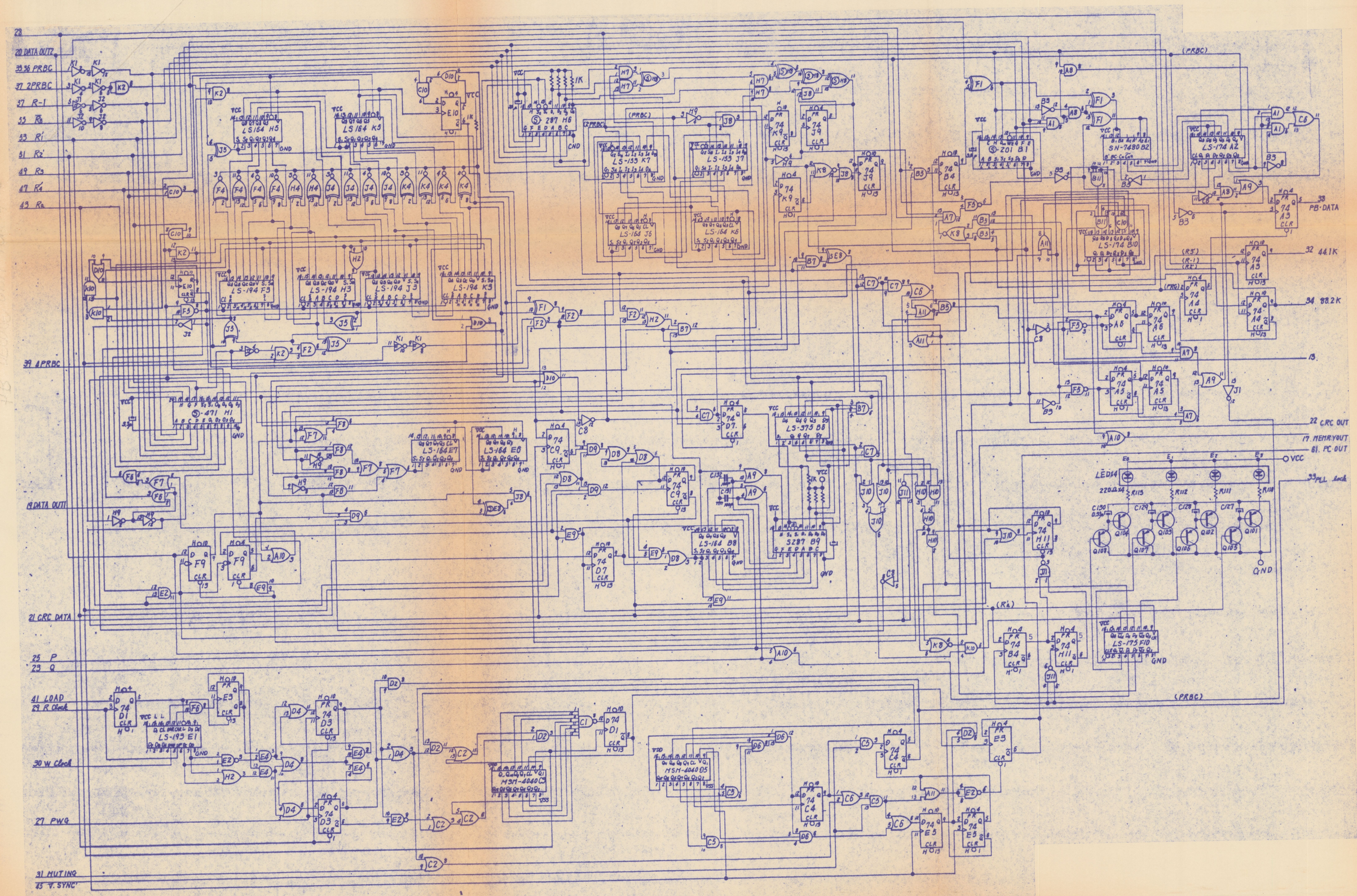


REC OUT DATA TIMING (DIGITAL I/O UNIT)

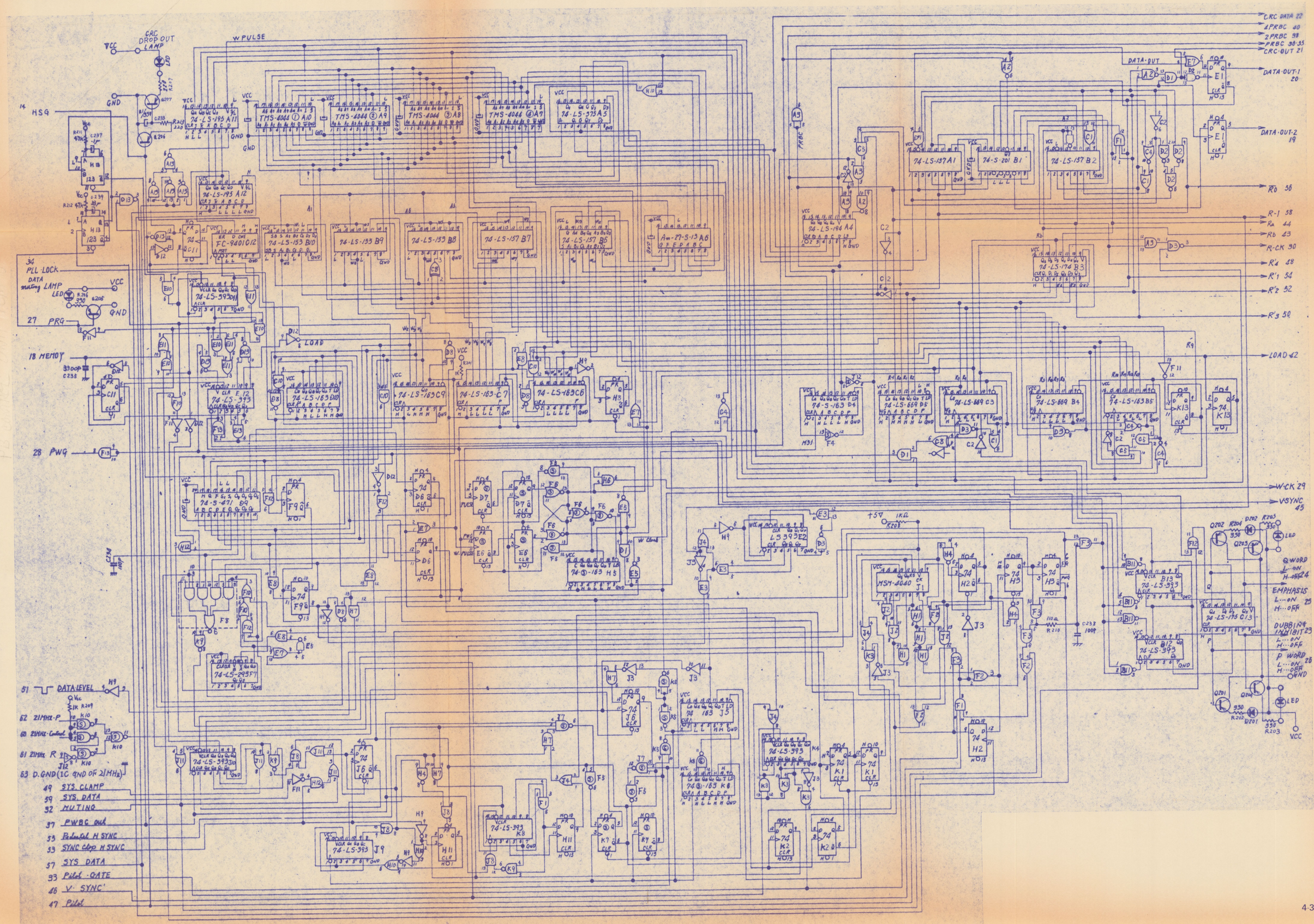
SECTION 4
SCHEMATIC DIAGRAM

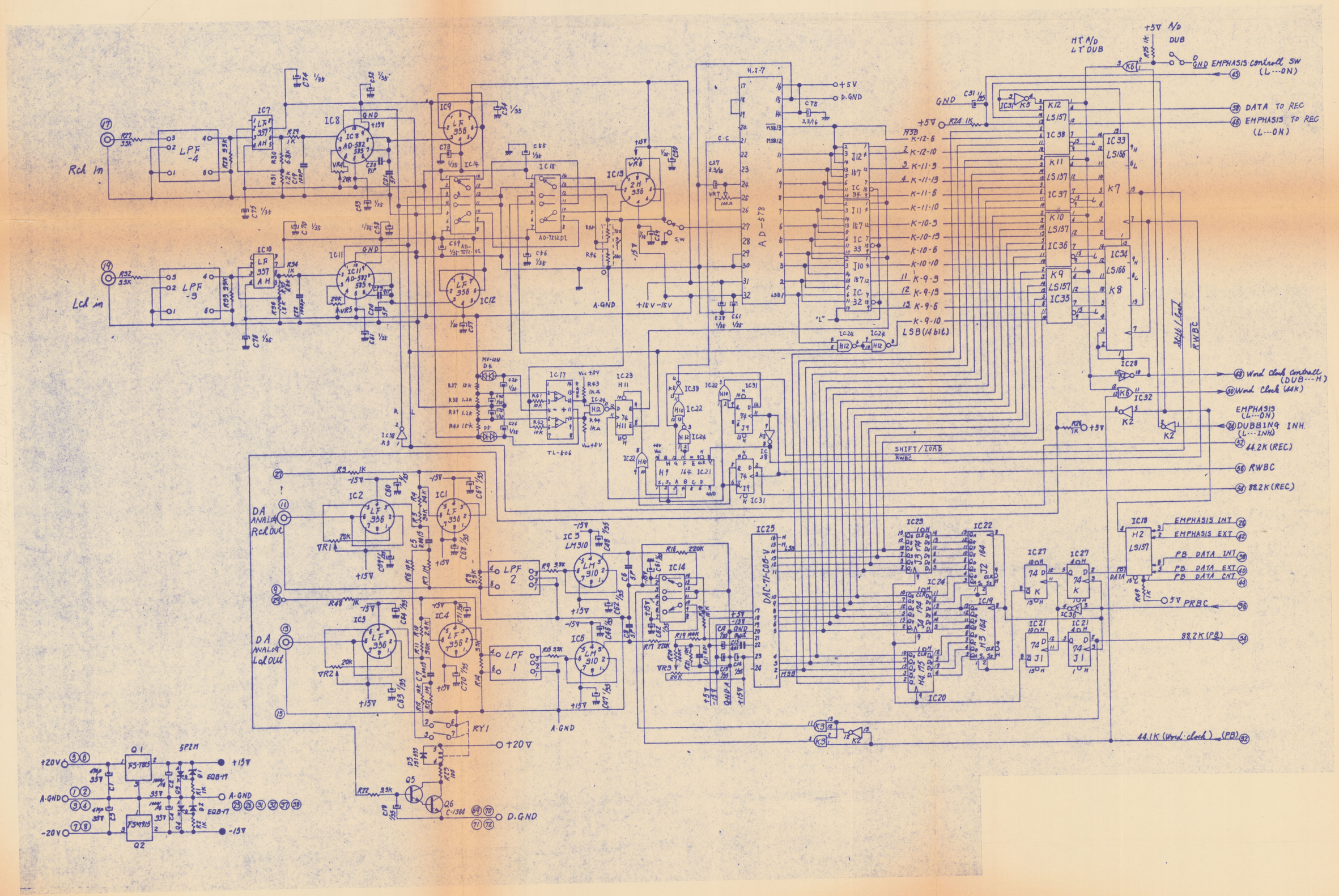
RECORDING UNIT (PCM-10/100)

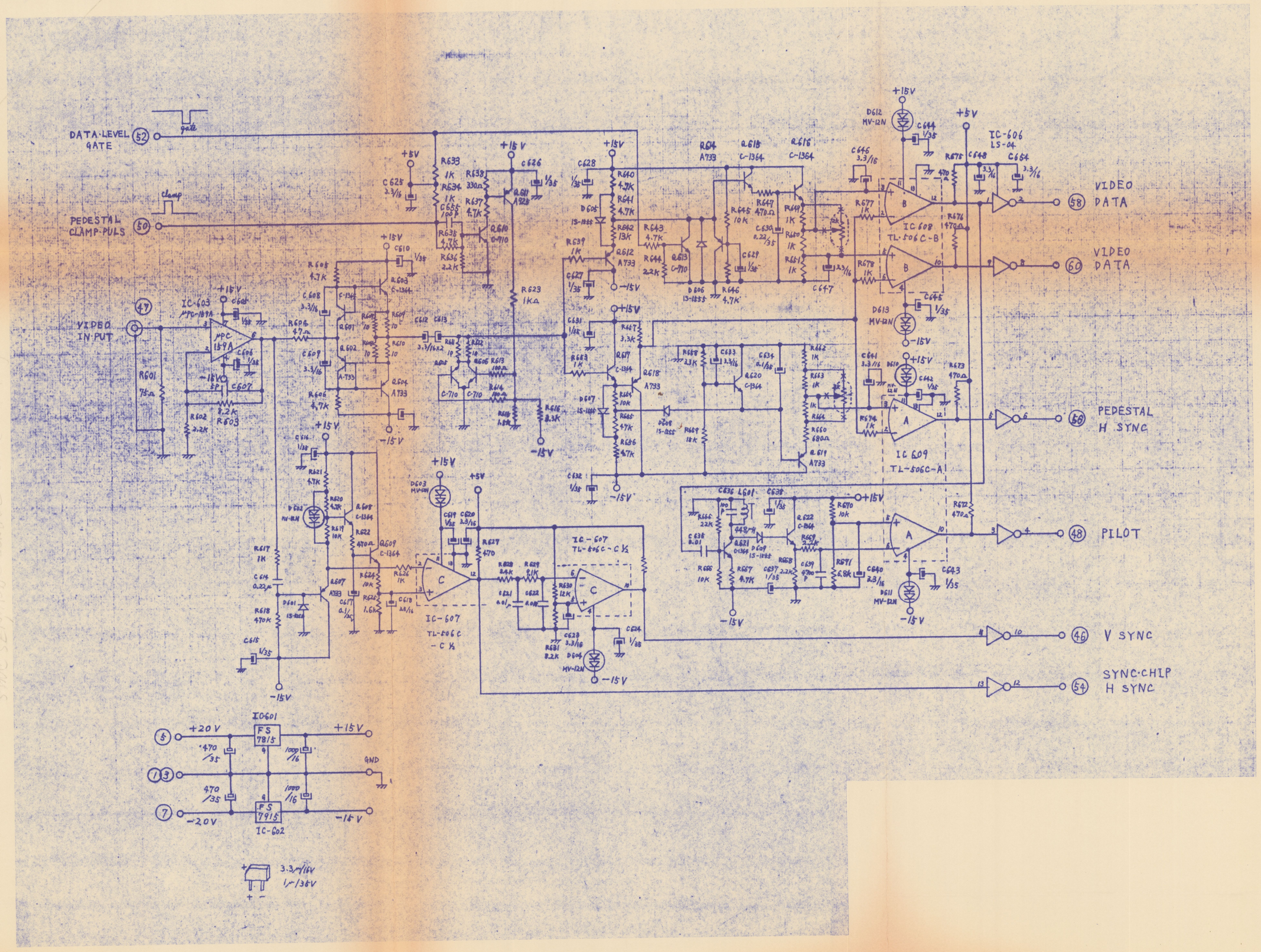


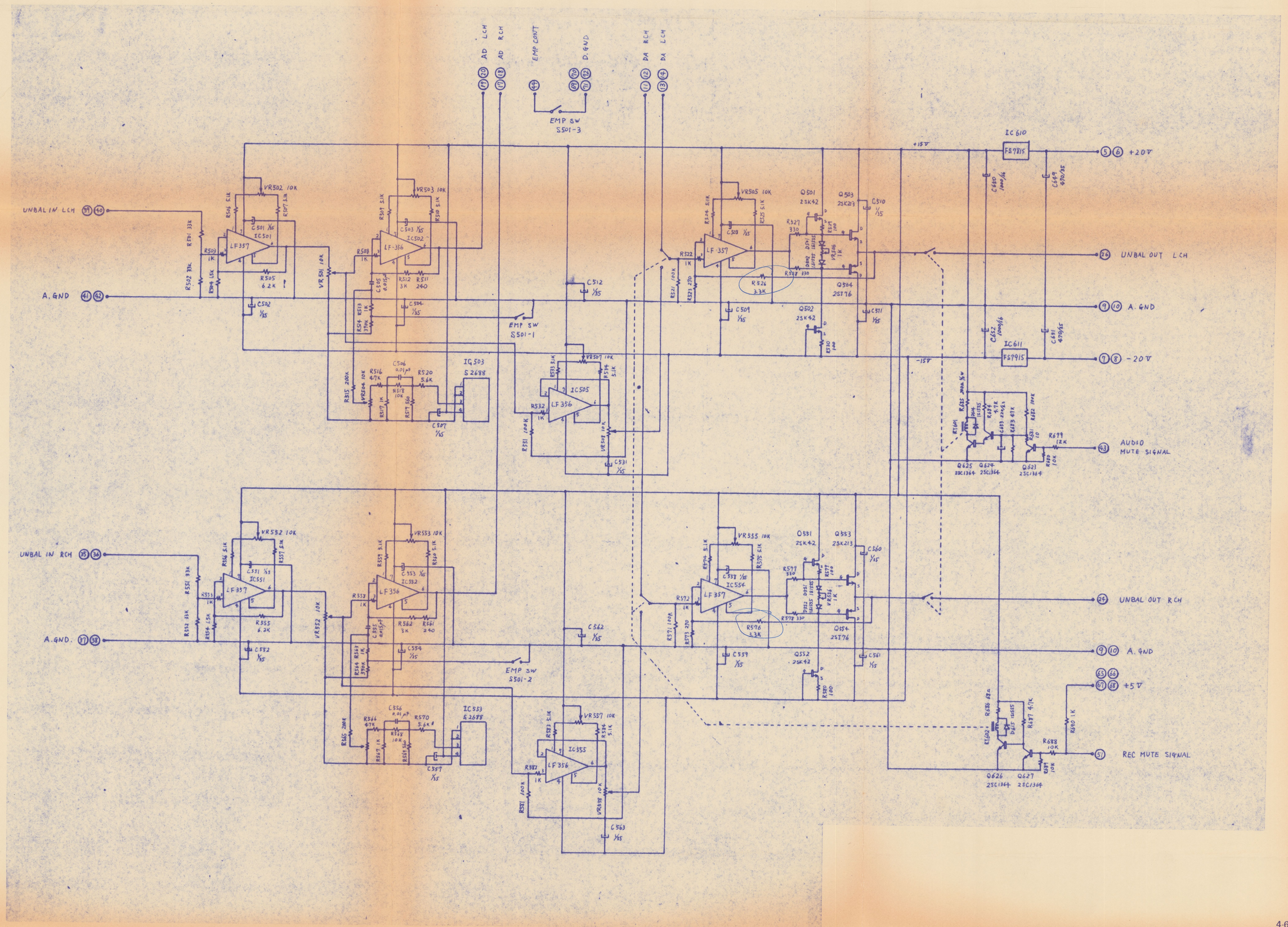

20 DATA OUT2
36 PRBC
37 2PRBC
57 R-1
55 R0
53 R1'
51 R2'
49 R3
47 R4'
43 R0
39 APRBC
14 DATA OUT1
21 CRC DATA
25 P
23 Q
41 LOAD
29 R Clock
30 W Clock
27 PWG
31 MUTING
15 V. SYNC'
19. GND
(PRBC)
(2PRBC)
(R4')
(R3')
(R-1)
(R2')
33 PB·DATA
32 44.1K
34 88.2K
13.
22 CRC OUT
17 MEMRYOUT
61. PC OUT
VCC
33 PLL lock
LS-164 H5
LS-164 K5
LS-194 F3
LS-194 H3
LS-194 J3
LS-194 K3
LS-471 H1
LS-164 E7
LS-164 E8
LS-193 E1
MSM-4040 C3
MSM-4040 D5
LS-373 B8
LS-164 B8
LS-174 A2
LS-174 B10
LS-175 F10
SN-7480 B2
LED14
220Ω
GND

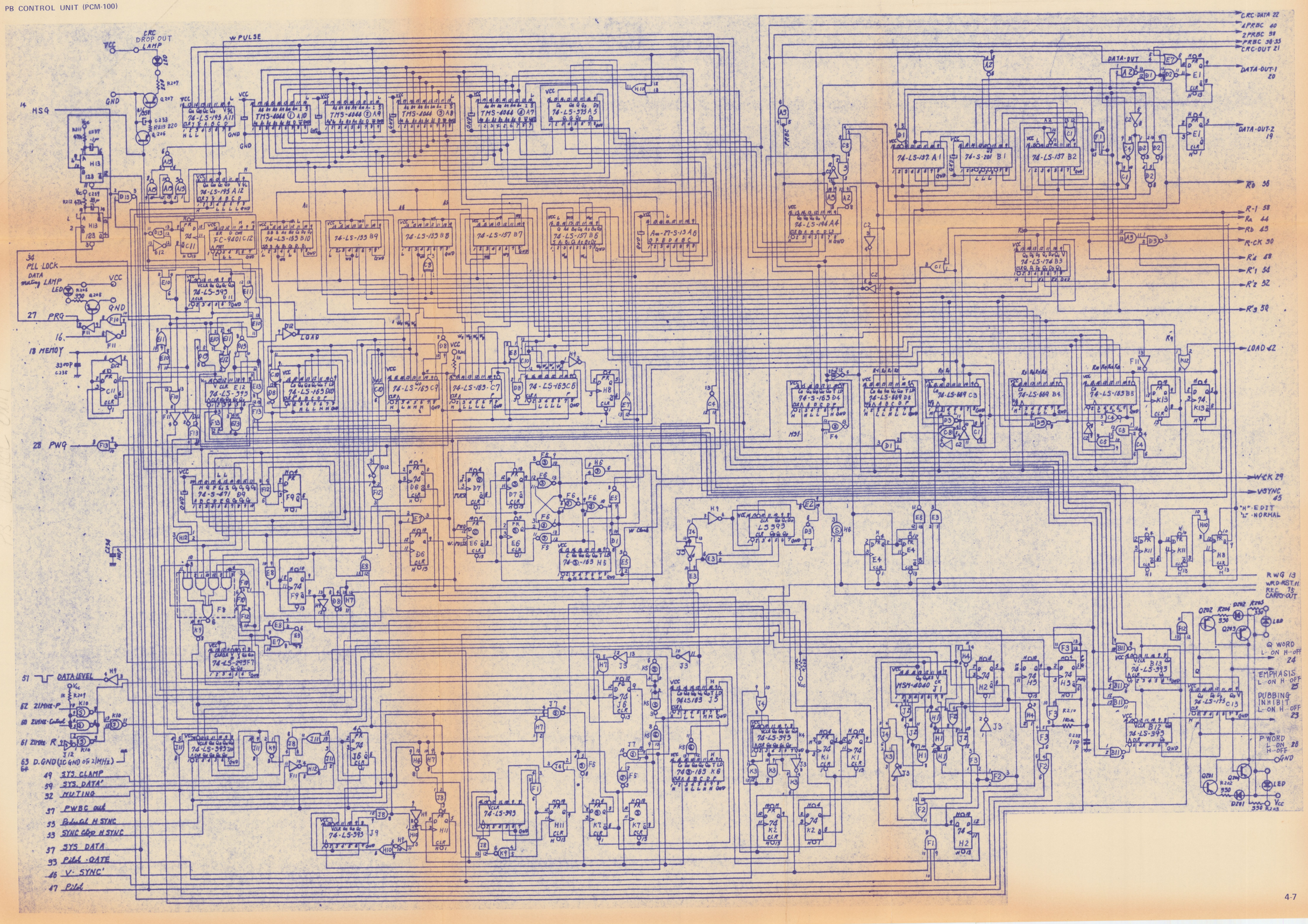
PB CONTROL UNIT (PCM-10)

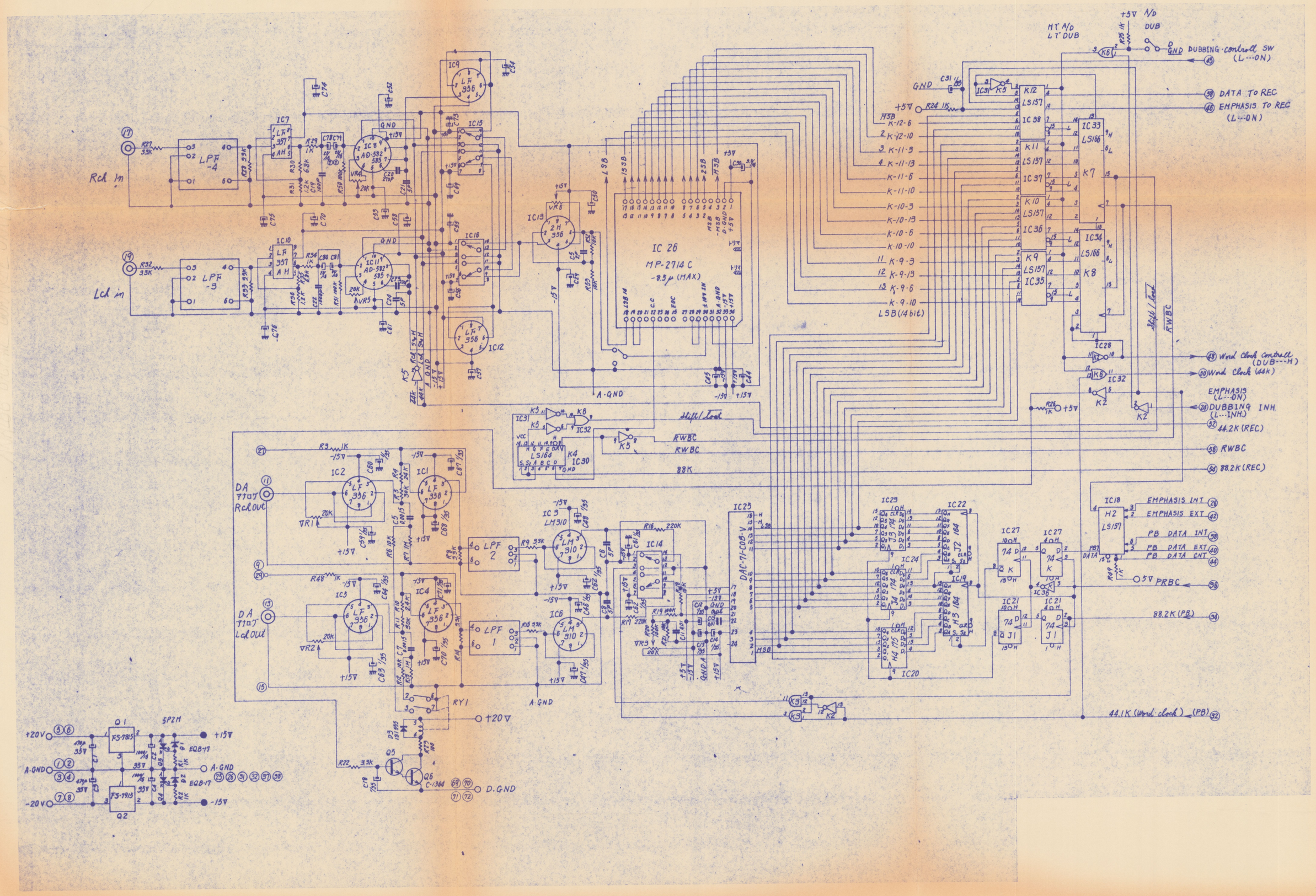

CRC DROP OUT LAMP
W PULSE
14 HSG
34 PLL LOCK
DATA muting LAMP
27 PRG
18 MEMOY
28 PWG
51 DATA LEVEL
62 21MHz-P
60 21MHz-Control
61 21MHz R
63 D.GND (1C GND OF 21MHz)
49 SYS. CLAMP
59 SYS. DATA
32 MUTING
37 PWBC out
35 Pedestal H SYNC
33 SYNC clop H SYNC
57 SYS DATA
53 Pilot GATE
46 V SYNC
47 Pilot
CRC DATA 22
4PRBC 40
2PRBC 38
PRBC 36-35
CRC OUT 21
DATA OUT 1 20
DATA OUT 2 19
Ro 56
R-1 58
Ra 44
Rb 43
R-CK 30
R'4 48
R'1 54
R'2 52
R'3 50
LOAD 42
W-CK 29
VSYNC 45
QWORD L...ON H...OFF 24
EMPHASIS L...ON H...OFF 25
DUBBING INHIBIT 23 L...ON H...OFF
P WORD L...ON H...OFF 26
TMS-4044 ① A10
TMS-4044 ② A9
TMS-4044 ③ A8
TMS-4044 ④ A7
74-LS-375 A5
74-LS-195 A11
74-LS-195 A12
FC-9401012
74-LS-153 B10
74-LS-153 B9
74-LS-153 B8
74-LS-157 B7
74-LS-157 B6
Am-27-S-13 A6
74-LS-157 A1
74-S-201 B1
74-LS-157 B2
74-LS-194 A4
74-LS-174 B3
74-LS-163 C9
74-LS-163 C7
74-LS-163 C6
74-S-163 D4
74-LS-669 D5
74-LS-669 C3
74-LS-669 B4
74-LS-163 B5
74-S-471 D9
74-LS-293 F7
LS 393 E2
74-S-163 H5
MSM-4040 J1
74-LS-393 B13
74-LS-175 C13
74-LS-393 B12
74-LS-393 J10
74-LS-393 J9
74-LS-393 K8
74-LS-393 K7
74-LS-393 K1
74-LS-393 K2
74-LS-163 J5
74-LS-163 K6
74-LS-393 J6
74-LS-393 H11
74-LS-393 H2
74-LS-393 H3
74-LS-393 H4
74-LS-393 H7
74-LS-393 H8
74-LS-393 H9
74-LS-393 H10
74-LS-393 H12
74-LS-393 H13
74-LS-393 H14
74-LS-393 H15
74-LS-393 H16
74-LS-393 H17
74-LS-393 H18
74-LS-393 H19
74-LS-393 H20
74-LS-393 H21
74-LS-393 H22
74-LS-393 H23
74-LS-393 H24
74-LS-393 H25
74-LS-393 H26
74-LS-393 H27
74-LS-393 H28
74-LS-393 H29
74-LS-393 H30
74-LS-393 H31
74-LS-393

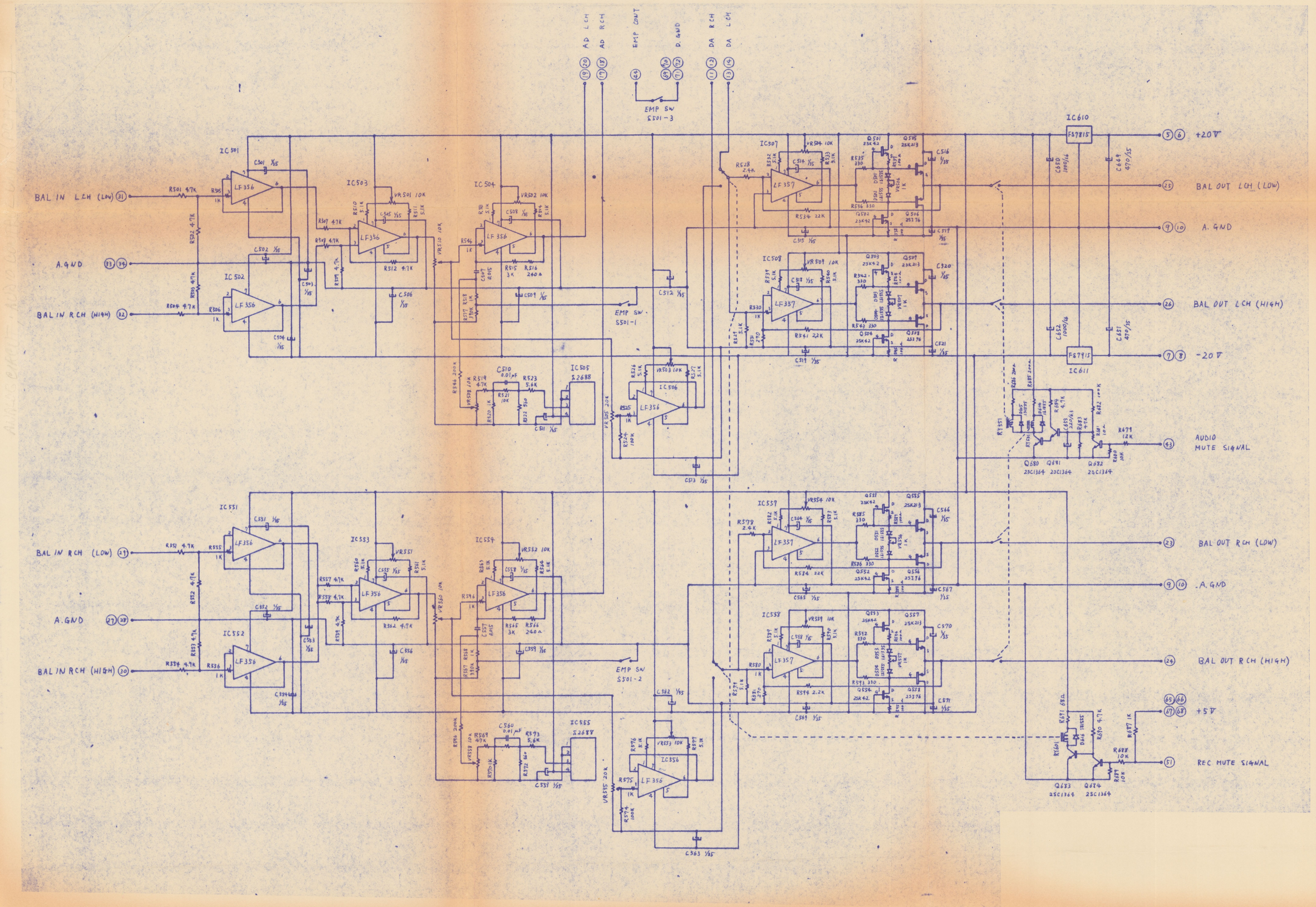

Rch In
Lch In
LPF -4
LPF -3
DA ANALOG Rch OUT
DA ANALOG Lch OUT
A-GND
D.GND
+15V -15V
+20V
-20V
EMPHASIS controll SW (L---ON)
DATA TO REC
EMPHASIS TO REC (L---ON)
Word Clock controll (DUB---H)
Word Clock (44K)
EMPHASIS (L---ON)
DUBBING INH. (L---INH)
44.2K (REC)
RWBC
88.2K (REC)
EMPHASIS INT
EMPHASIS EXT
PB DATA INT
PB DATA EXT
PB DATA CNT
PRBC
88.2K (PB)
44.1K (Word clock) (PB)
SHIFT/LOAD
LSB (14 bit)
AD-578
DAC-71-CDB-V
LM 310
LF 356
AD-582
AD-7212D1
TL-606
5P2M

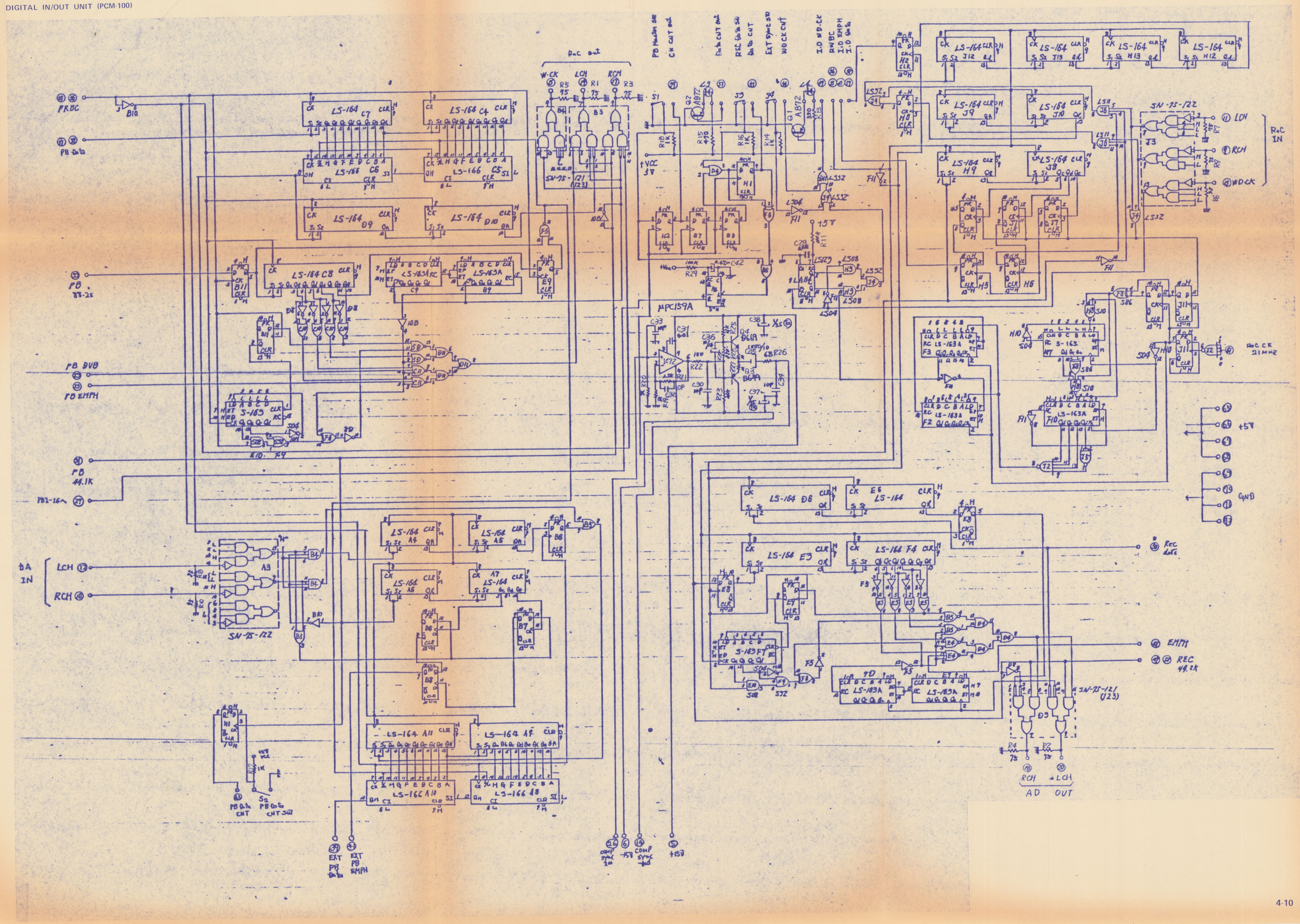

DATA·LEVEL GATE
52
gate
PEDESTAL CLAMP·PULS
50
clamp
VIDEO IN·PUT
49
IC-603
μPC-1597A
IC-606
LS-04
VIDEO DATA
58
VIDEO DATA
60
PEDESTAL H SYNC
56
IC 608
TL-506C-B
IC 609
TL-506C-A
PILOT
48
V SYNC
46
SYNC·CHIP H SYNC
54
IC-607
TL-506C-C ½
IC-607
TL-506C-C ½
IC601
FS 7815
IC-602
FS 7915
+20V
-20V
+15V
-15V
+5V
GND
5
13
7
3.3μ/16V
1μ/35V


AD LCH
AD RCH
EMP CONT
D. GND
DA RCH
DA LCH
EMP SW S501-3
EMP SW S501-1
EMP SW S501-2
UNBAL IN LCH
A. GND
UNBAL IN RCH
A. GND
IC 610 FS7815
IC 611 FS7915
+15V
-15V
+20V
UNBAL OUT LCH
A. GND
-20V
AUDIO MUTE SIGNAL
UNBAL OUT RCH
A. GND
+5V
REC MUTE SIGNAL
IC 503 S2688
IC 553 S2688
IC501 LF357
IC502 LF356
IC505 LF356
IC551 LF357
IC552 LF356
IC554 LF357
IC555 LF356
Q501 2SK42
Q502 2SK42
Q503 2SK213
Q504 2ST76
Q551 2SK42
Q552 2SK42
Q553 2SK213
Q554 2ST76
Q625 2SC1364
Q624 2SC1364
Q623 2SC1364
Q626 2SC1364
Q627 2SC1364


CRC DROP OUT LAMP
W PULSE
HSG
PLL LOCK
DATA mating LAMP
PRG
MEMORY
PWG
DATA LEVEL
21MHz-P
21MHz-Control
21MHz-R
D.GND(IC GND of 21MHz)
SYS. CLAMP
SYS. DATA'
MUTING
PWBC out
Pulsed H SYNC
SYNC Clap H SYNC
SYS DATA
Pilot GATE
V SYNC'
Pilot
CRC-DATA 22
1PRBC 40
2PRBC 38
PRBC 36-35
CRC-OUT 21
DATA-OUT-1 20
DATA-OUT-2 19
Rb 56
R-1 58
Ra 44
Rb 43
R-CK 30
R'a 48
R'1 54
R'2 52
R'3 50
LOAD 42
W-CK 29
VSYNC 45
"H" EDIT
"L" NORMAL
RWG 13
WRD-RST 11
REC 15
CARD-OUT
Q WORD
L-ON H-OFF
24
EMPHASIS
L-ON H-OFF
25
DUBBING INHIBIT
L-ON H-OFF
23
P WORD
L-ON H-OFF
28
GND
LED
Vcc

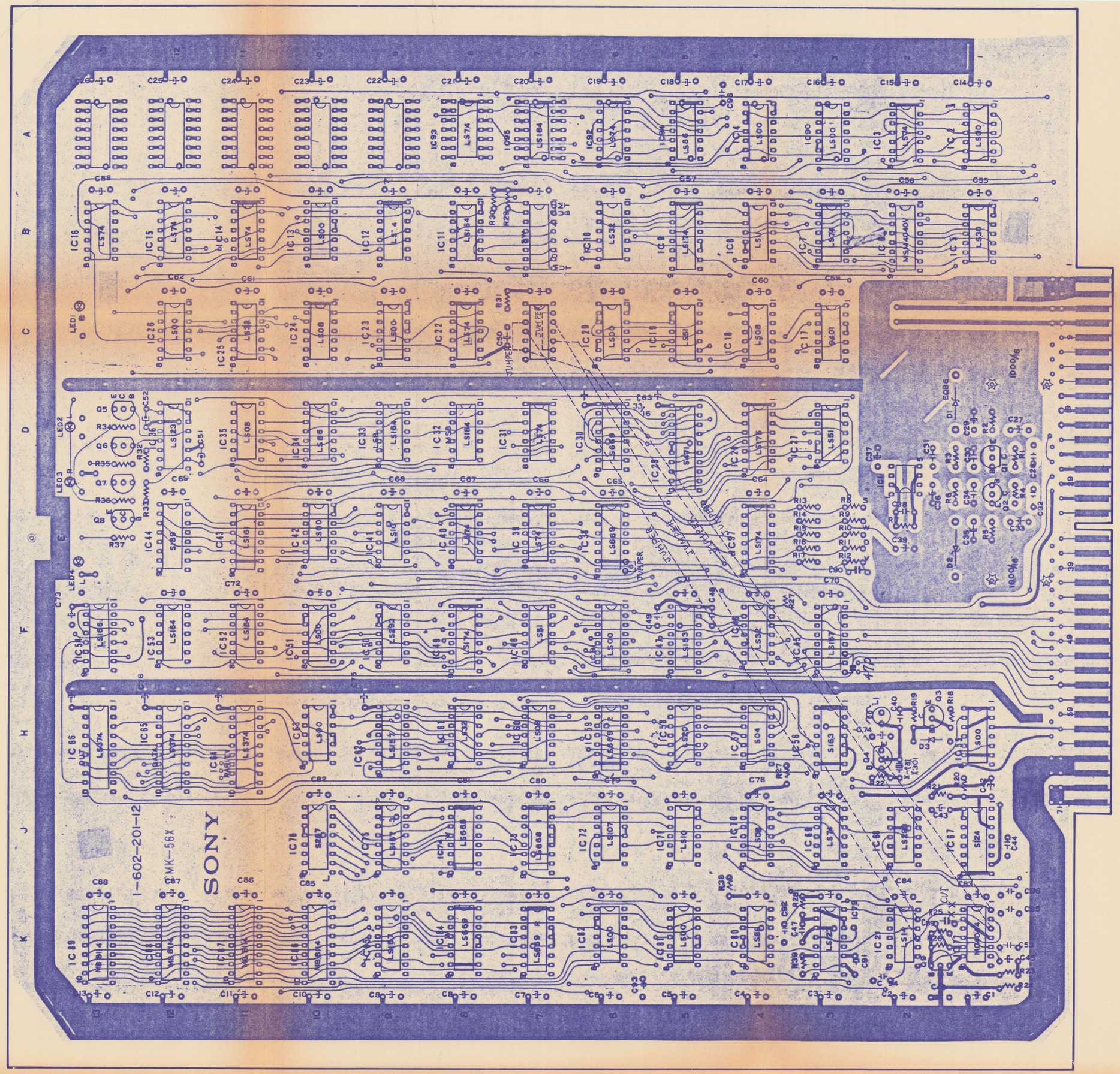

Rch in
Lch in
LPF -4
LPF -3
IC 26
MP-2714 C
-8.5μ (MAX)
LSB(14 bit)
DUBBING controll SW (L---ON)
DATA TO REC
EMPHASIS TO REC (L---ON)
Word Clock controll (DUB---H)
Word Clock (44K)
EMPHASIS (L---ON)
DUBBING INH (L---INH)
44.2K (REC)
RWBC
88.2K (REC)
EMPHASIS INT
EMPHASIS EXT
PB DATA INT
PB DATA EXT
PB DATA CNT
PRBC
88.2K (PB)
44.1K (word clock) (PB)
DA Rch out
DA Lch out
DAC-71-C08-V
A·GND
D.GND
+20V
-20V
+15V
-15V


BAL IN LCH (LOW)
A.GND
BAL IN RCH (HIGH)
BAL IN RCH (LOW)
BAL IN RCH (HIGH)
AD LCH
AD RCH
EMP OUT
D.GND
DA RCH
DA LCH
EMP SW S501-3
EMP SW S501-1
EMP SW S501-2
IC501
IC502
IC503
IC504
IC505 S2688
IC506
IC507
IC508
IC509
IC510
IC551
IC552
IC553
IC554
IC555 S2688
IC556
IC557
IC558
IC610 FS7815
IC611 FS7915
+20V
BAL OUT LCH (LOW)
A. GND
BAL OUT LCH (HIGH)
-20V
AUDIO MUTE SIGNAL
BAL OUT RCH (LOW)
BAL OUT RCH (HIGH)
+5V
REC MUTE SIGNAL


PRBC
PB Data
PB 88.2K
PB DVB
PB EMPH
PB 44.1K
PB2-16A
DA IN
LCH
RCH
SN-75-122
LS-164
LS-166
LS-163A
S-163
SN-75-121 (123)
MPC159A
PB Data CNT
PB Data CNT SW
EXT PB
EXT PB EMPH
Rec Data
EMPH
REC 44.2K
Rec CK 11.2MHz
GND
AD OUT

SECTION 5
PRINTED WIRING BOARD

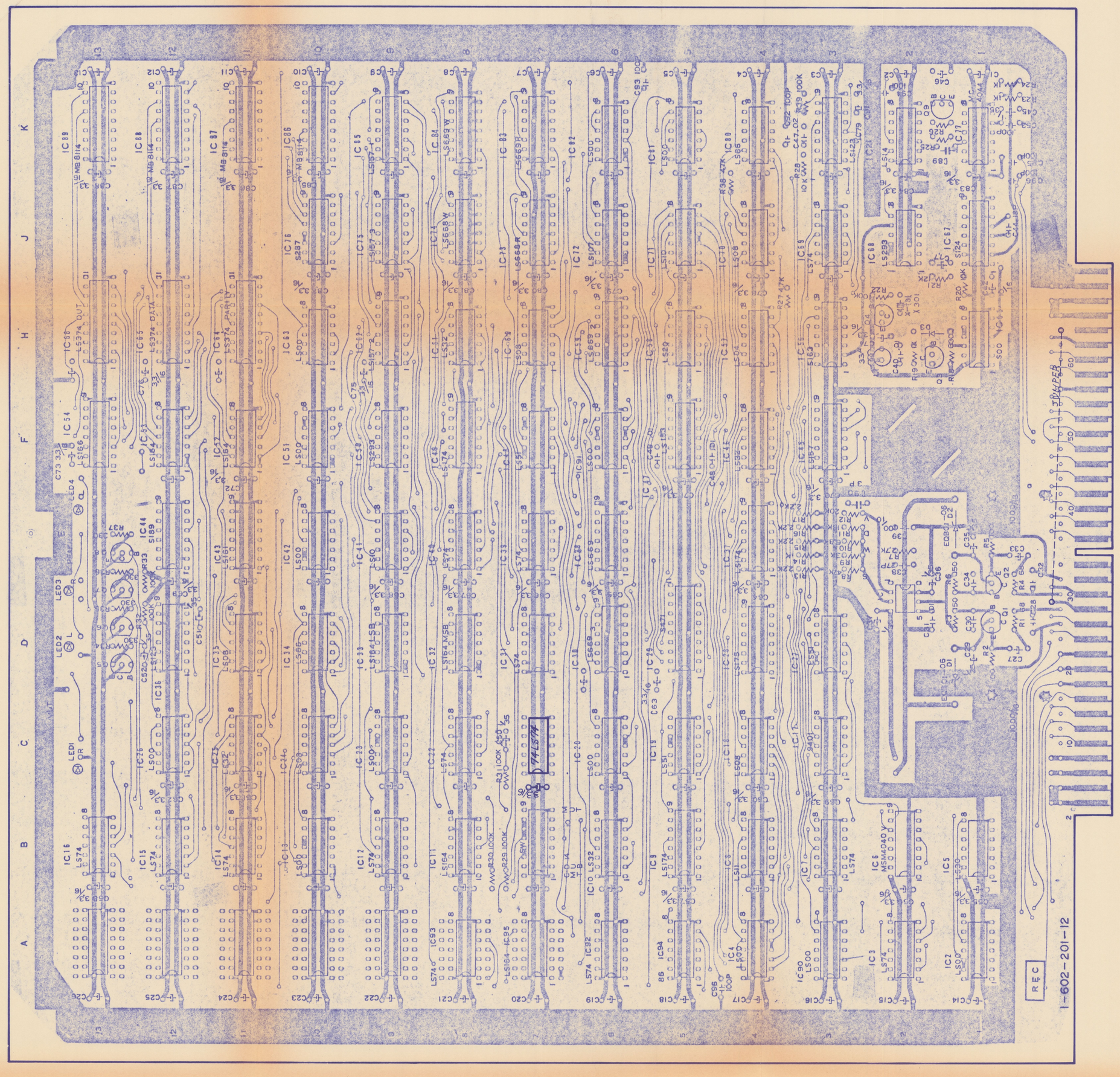
RECORDING UNIT (PCM-10/100)
– DIP SIDE –

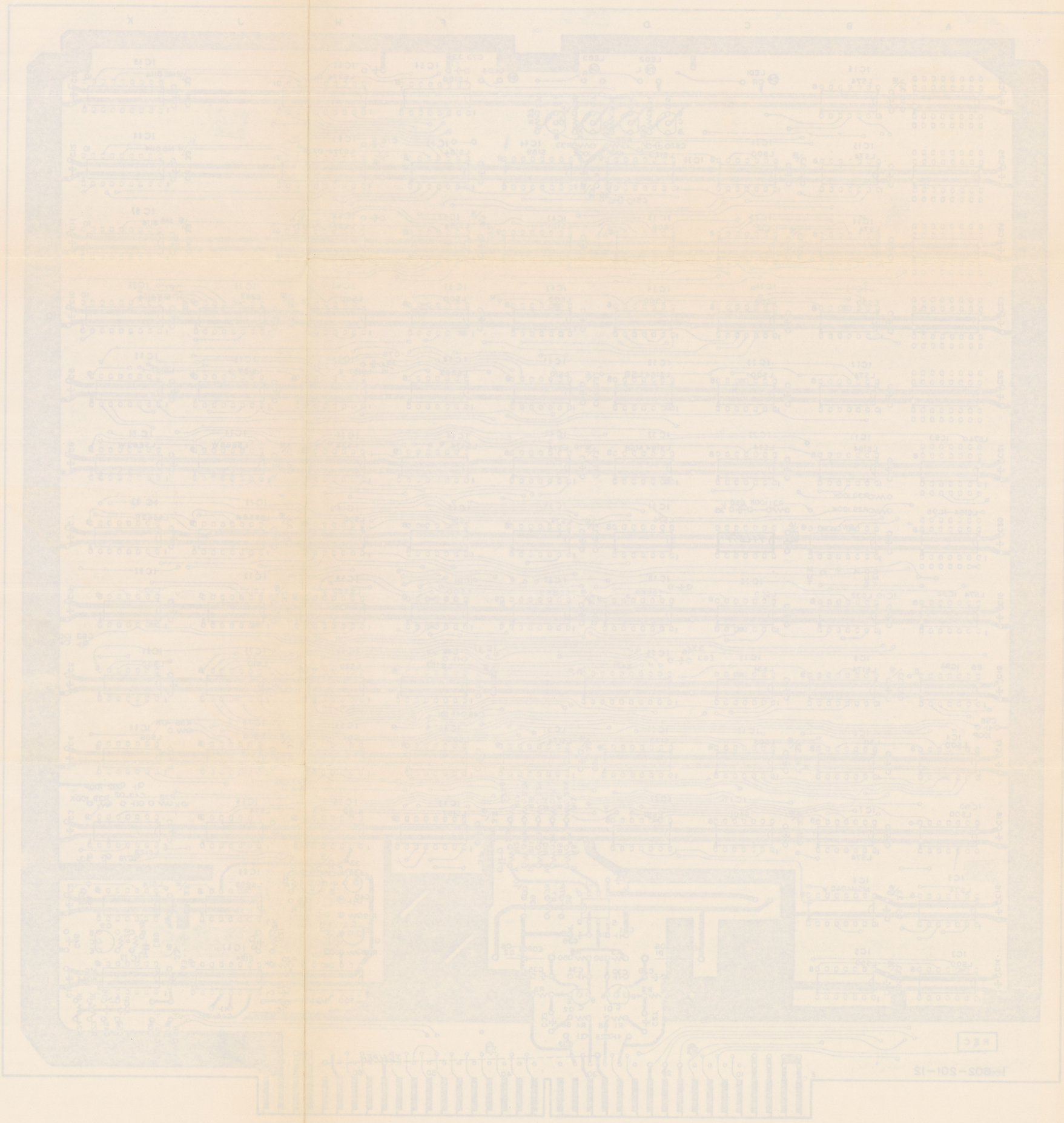


SECTION 5
PRINTED WIRING BOARD

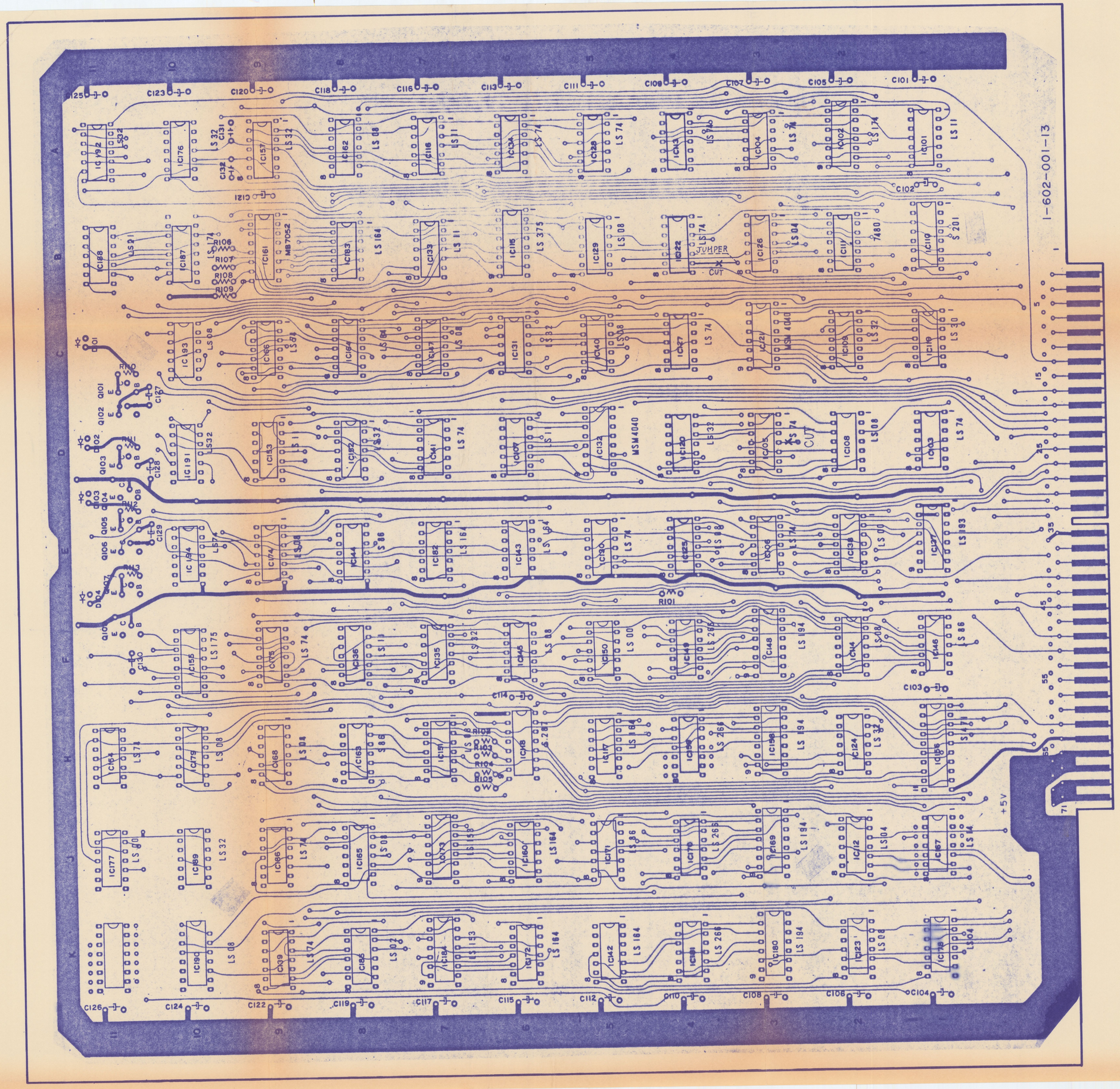
RECORDING UNIT (MCM 1874M)
— DIP SIDE —

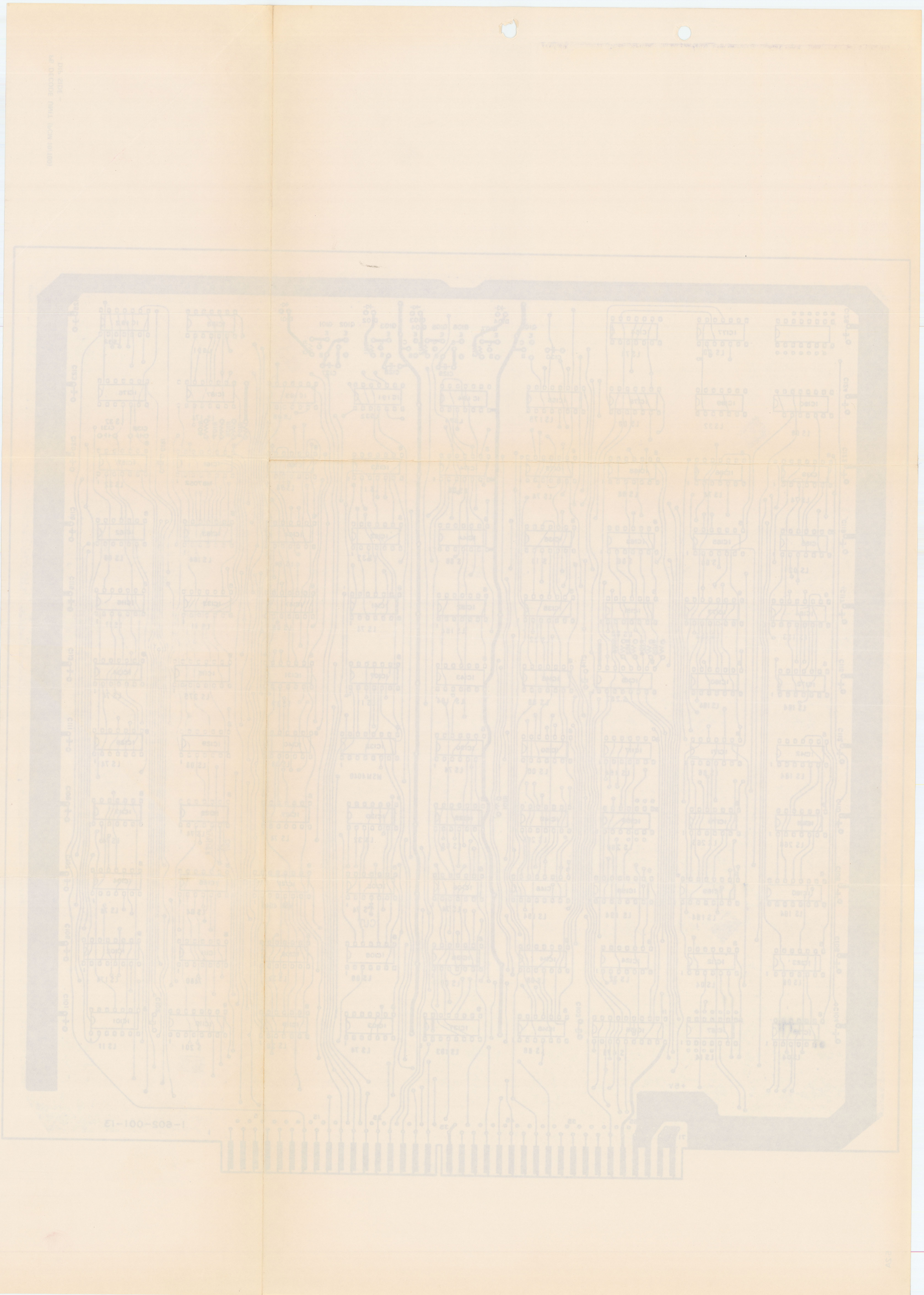
RECORDING UNIT (PCM-10/100)
– MOUNT SIDE –



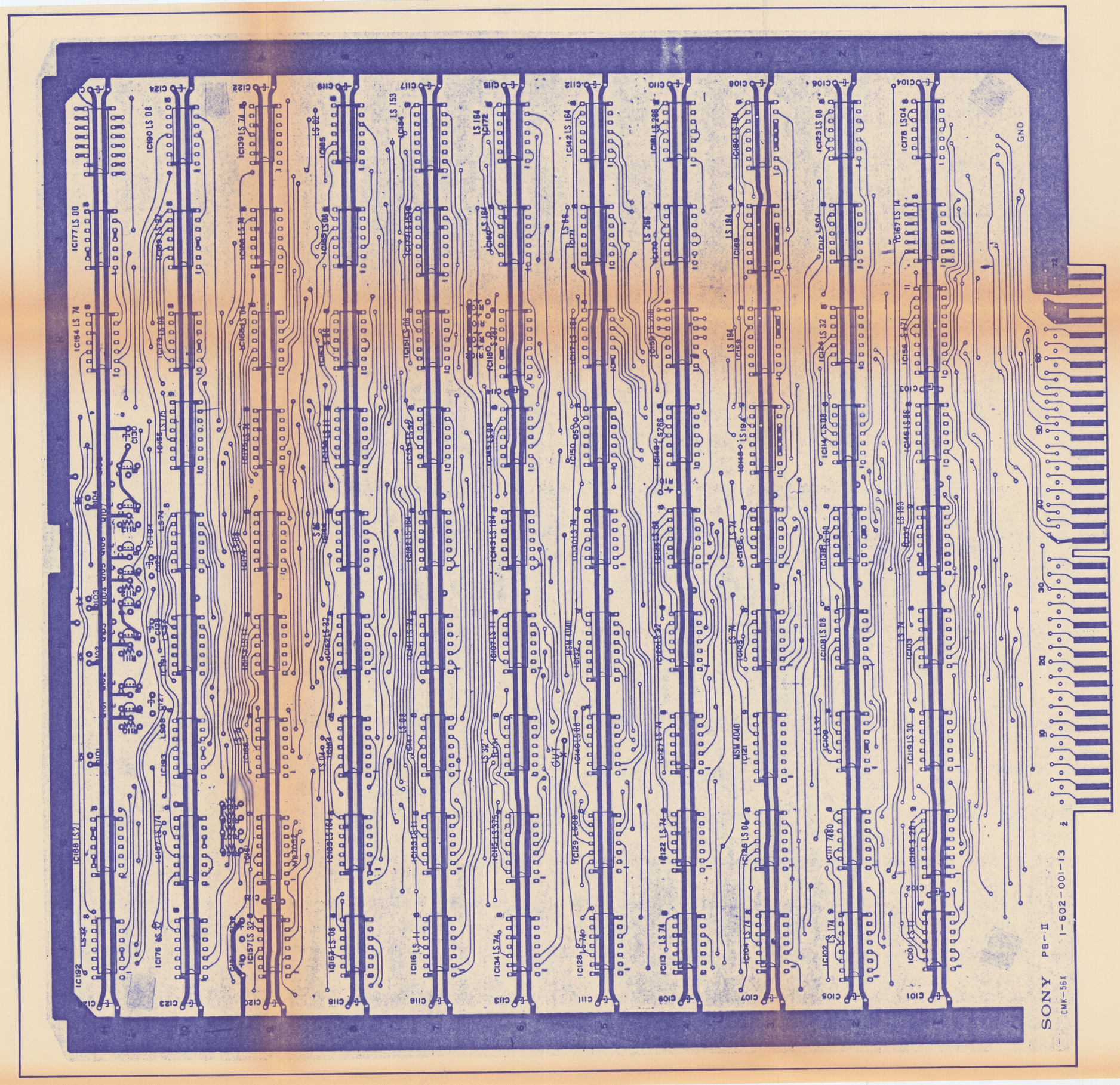


PB DECODE UNIT (PCM 10/100)
– DIP SIDE –

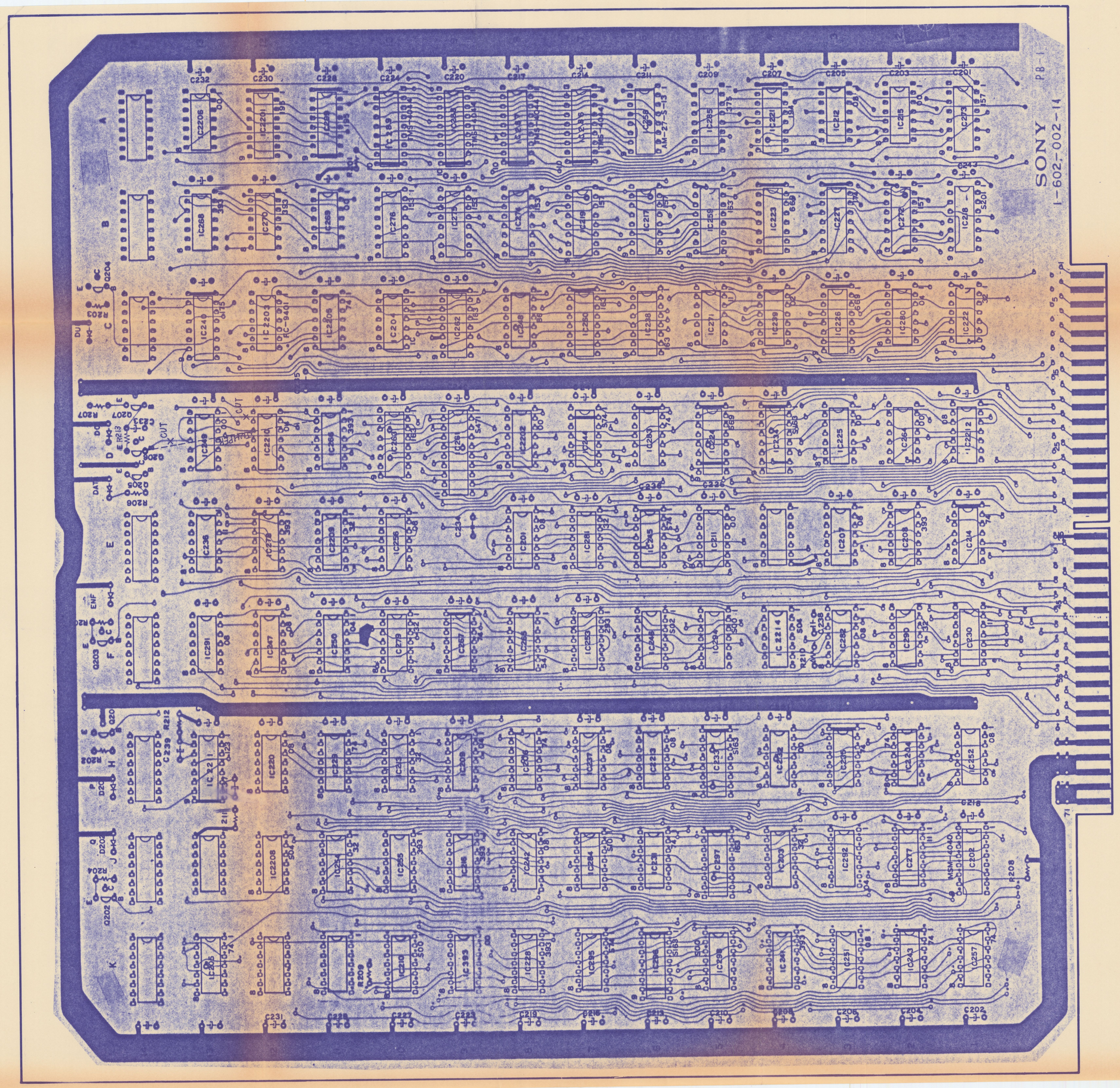




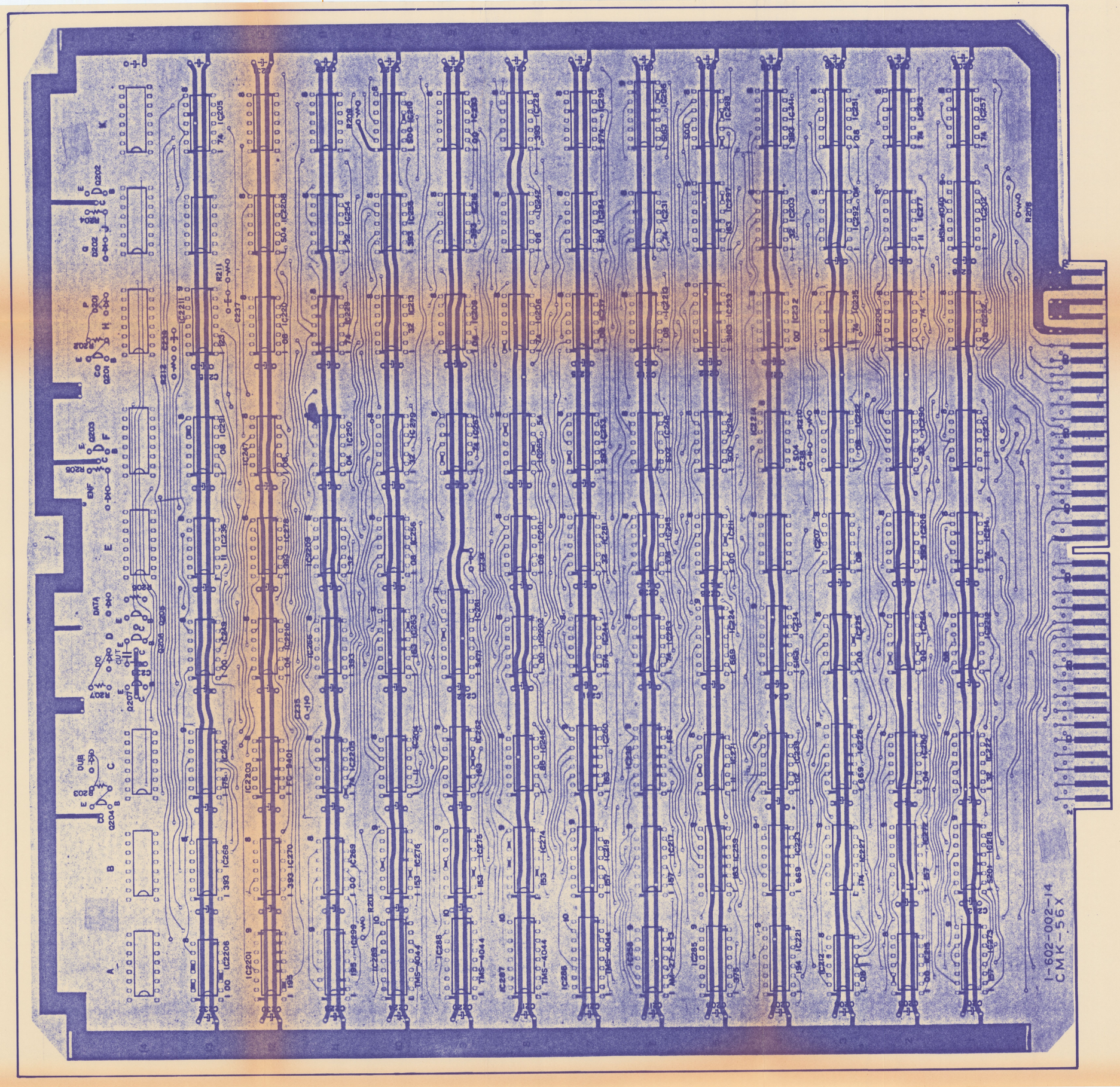
PB DECODE UNIT (PCM-10/100)
– MOUNT SIDE –

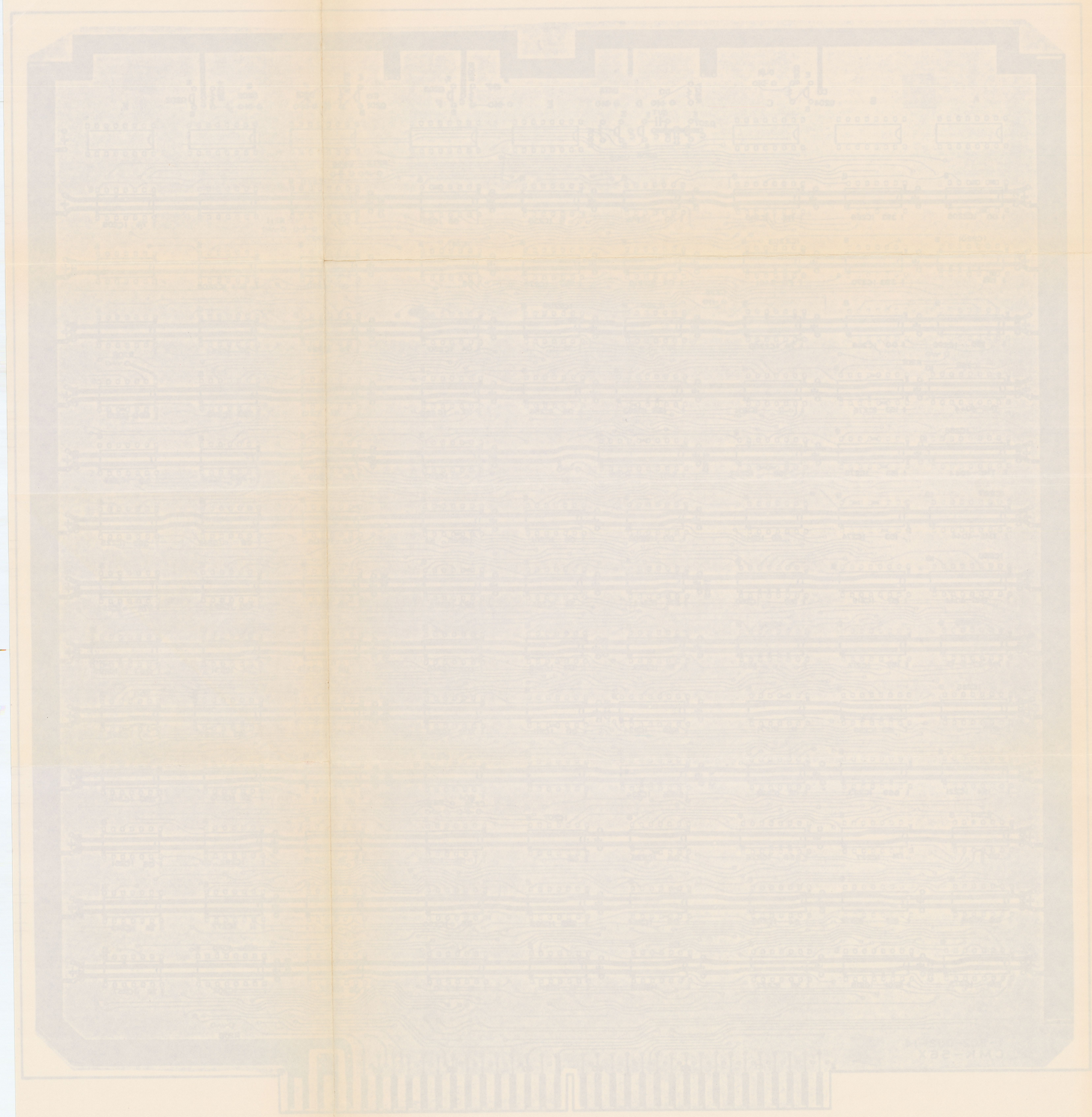


PB CONTROL UNIT (PCM-10)
– DIP SIDE –

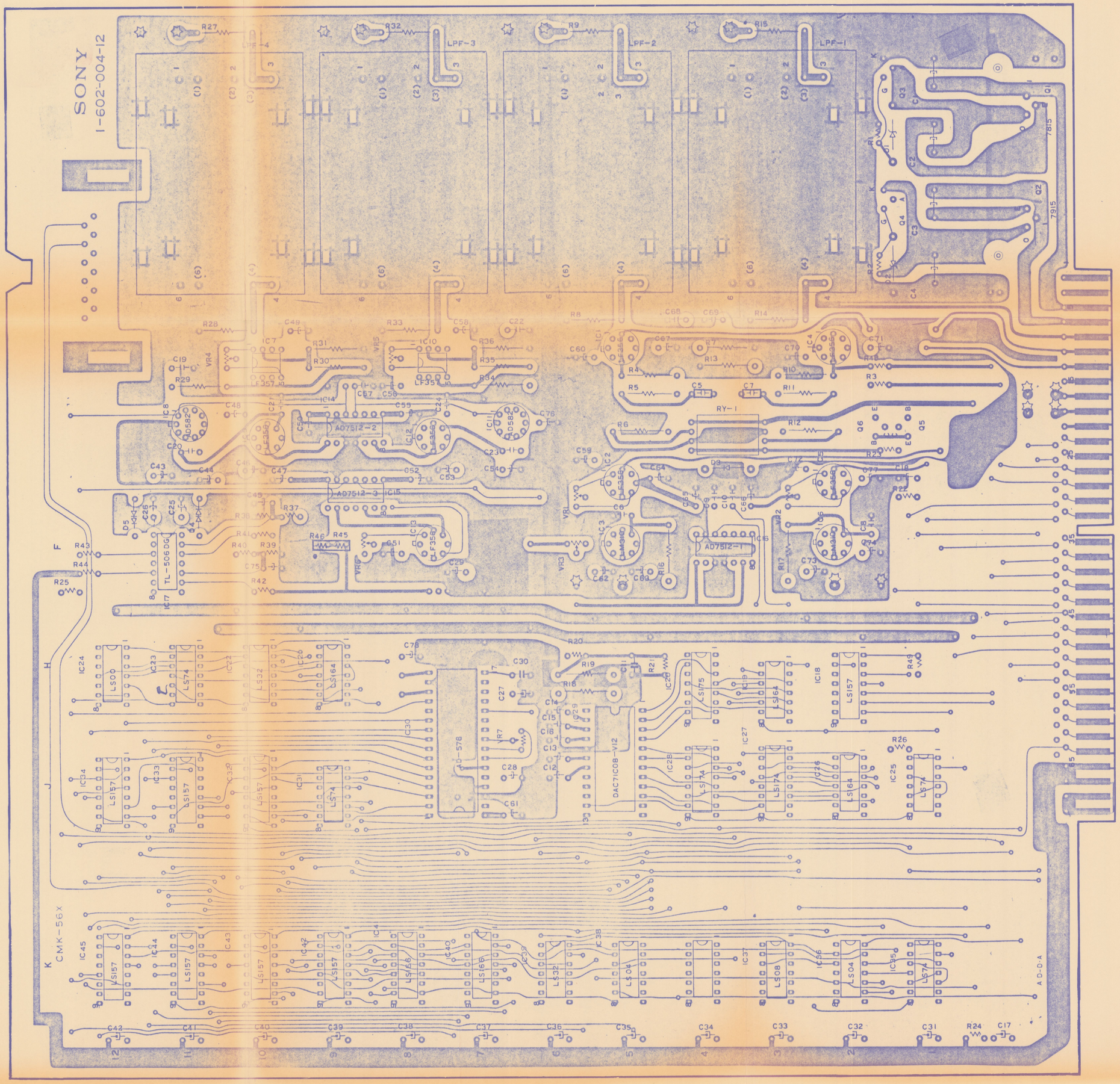


PB CONTROL UNIT (PCM-10)
– MOUNT SIDE –

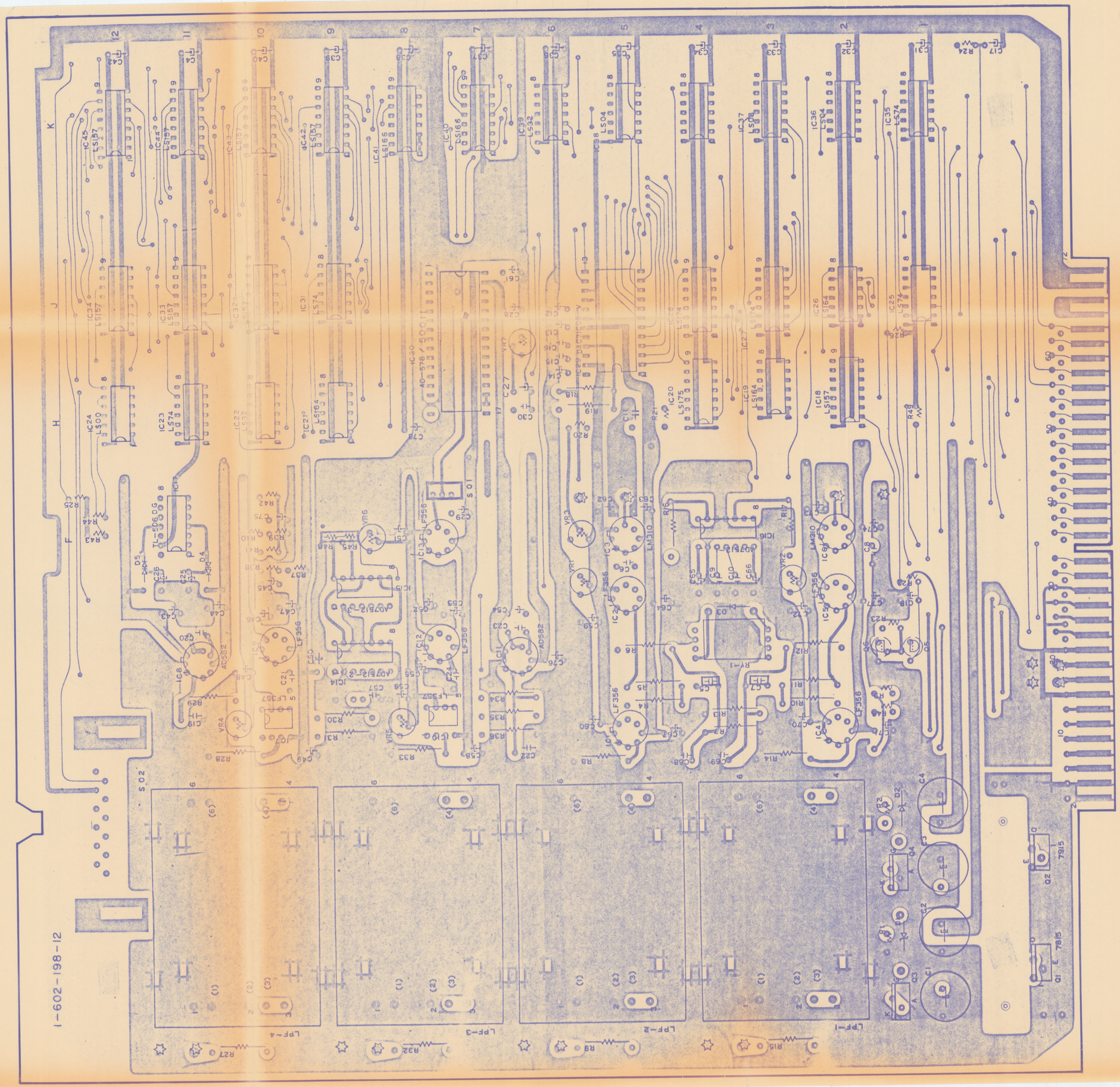


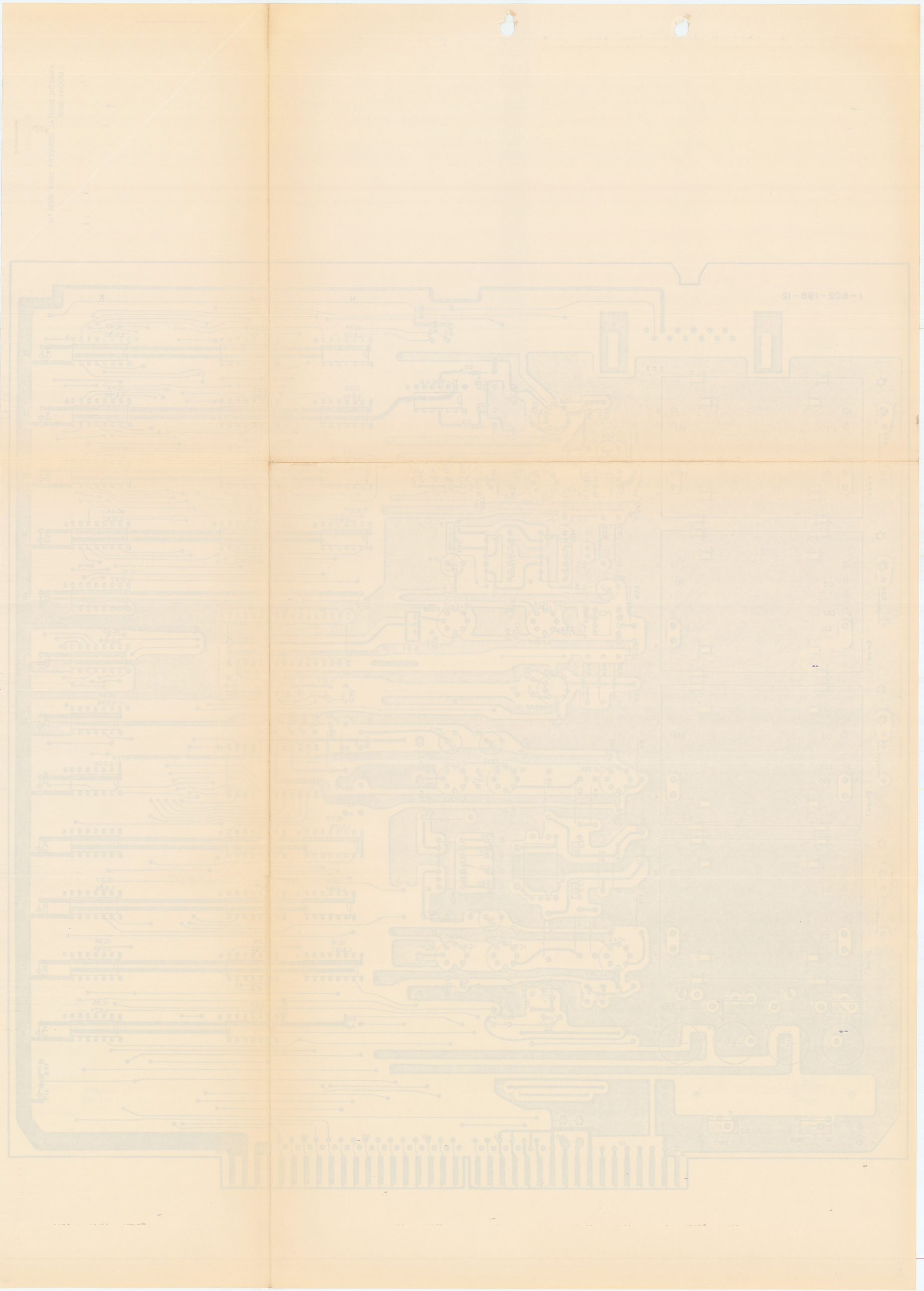


ANALOG DIGITAL CONVERT UNIT (PCM-10)
– DIP SIDE –

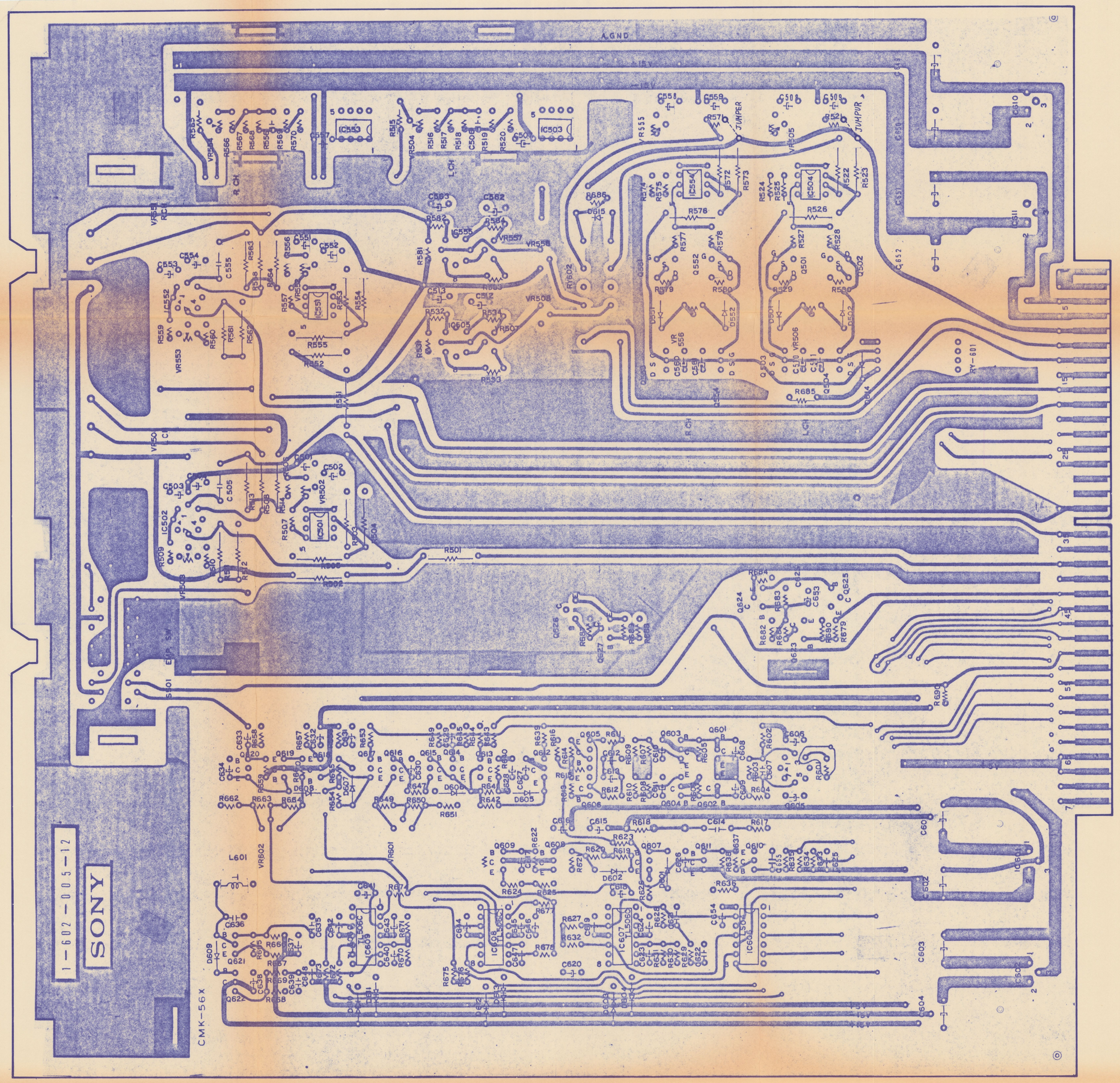


ANALOG DIGITAL CONVERT UNIT (PCM-10)
– MOUNT SIDE –

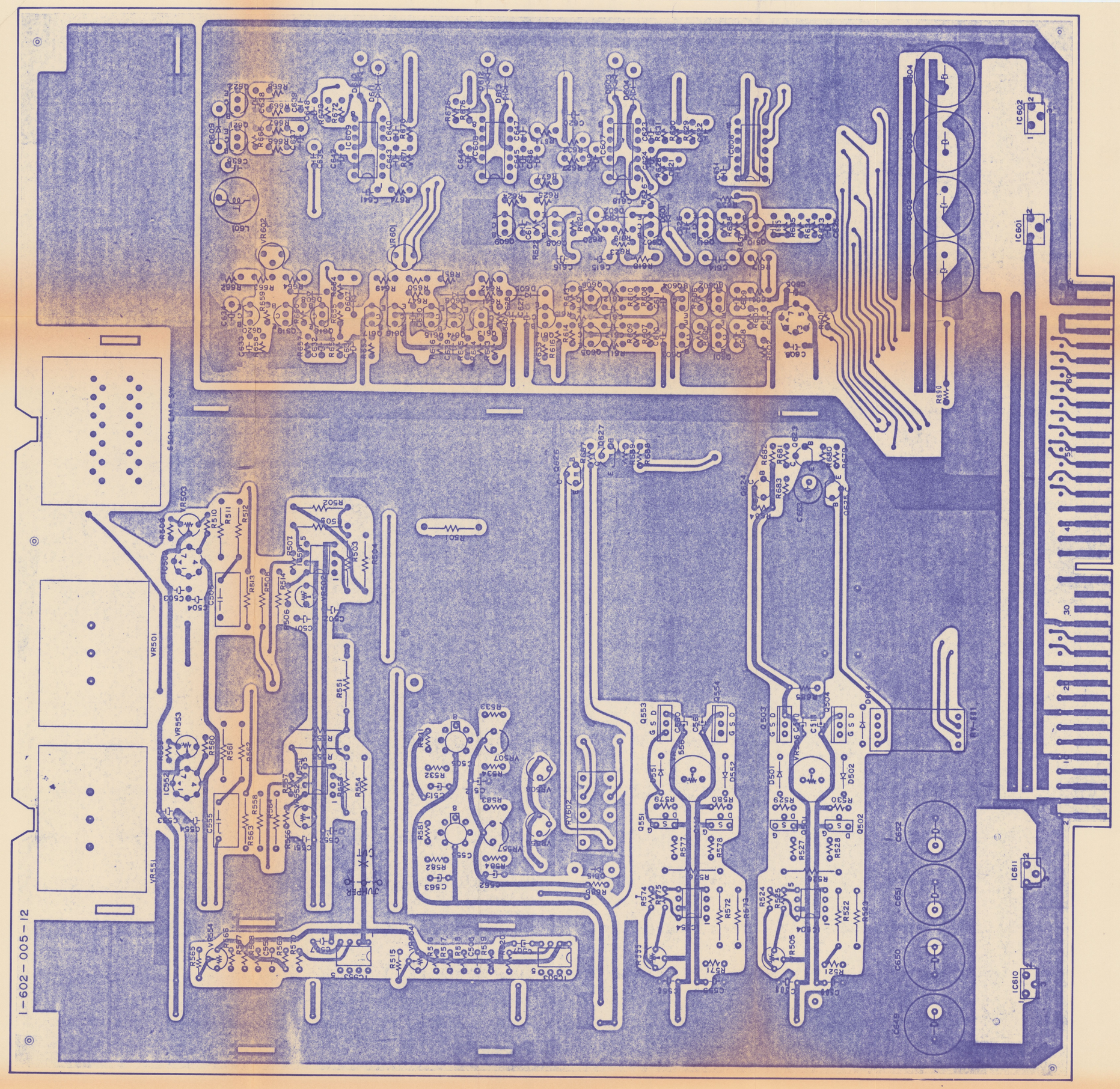


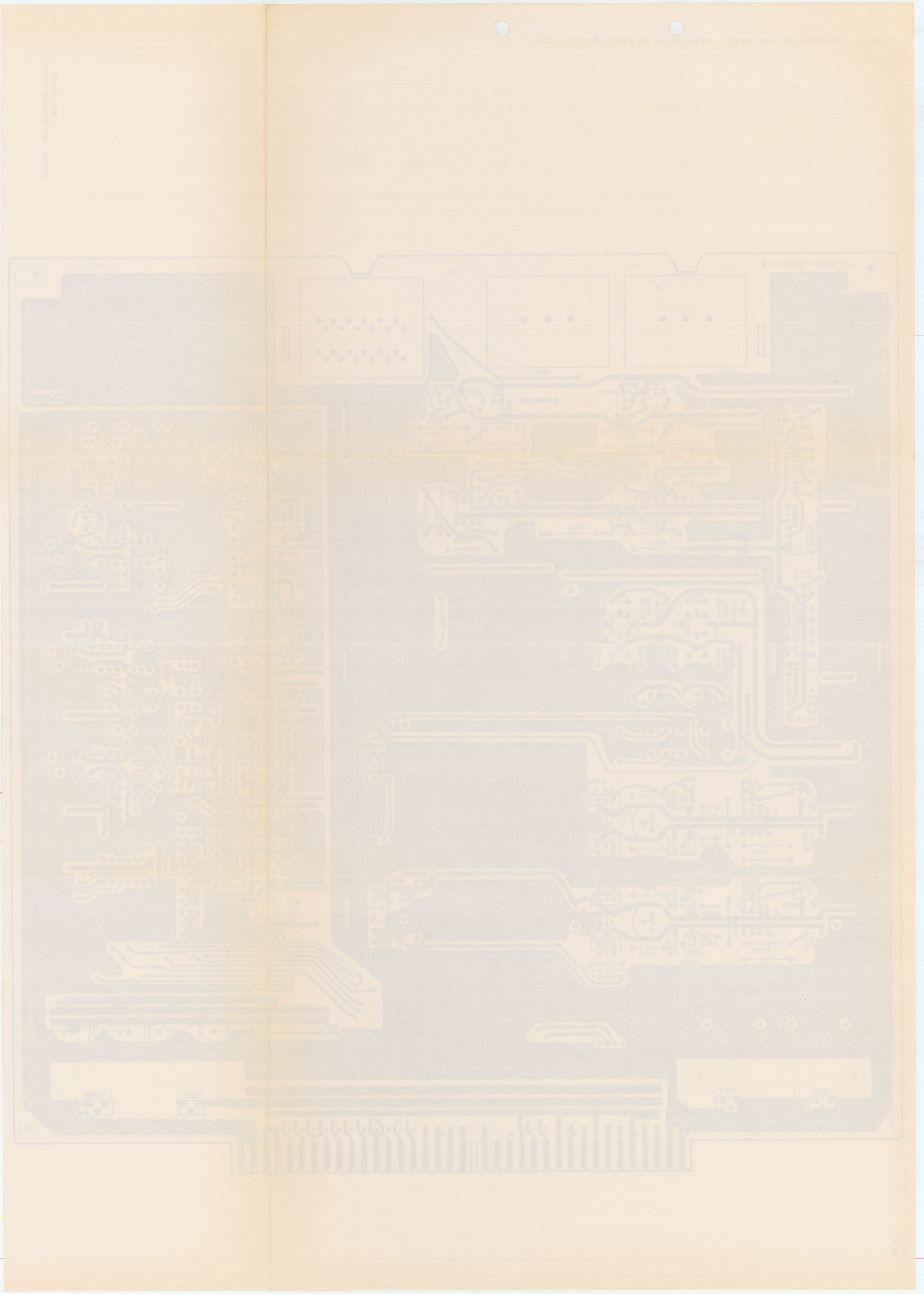


AUDIO CONTROL UNIT (PCM-10)
– DIP SIDE –

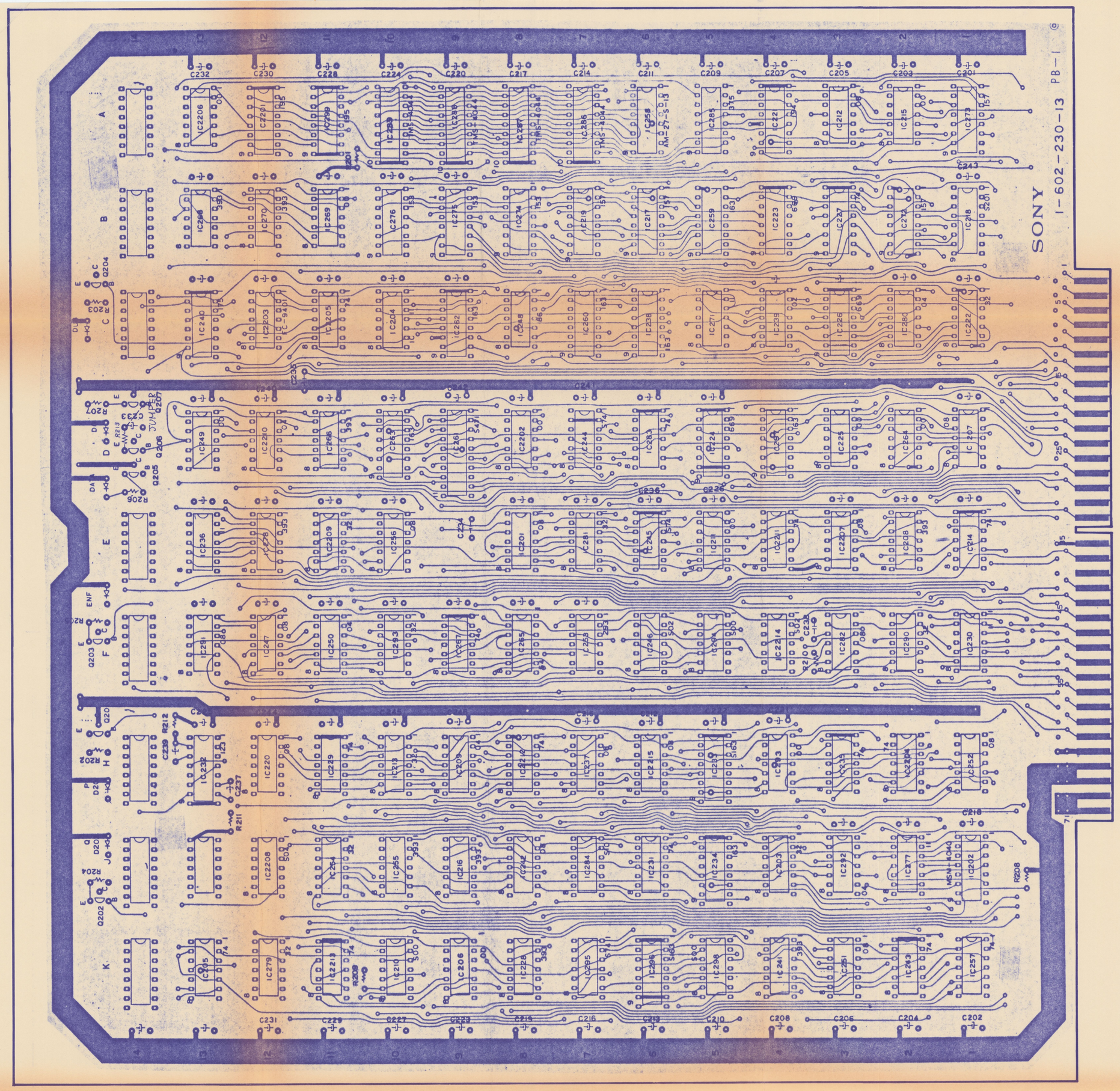


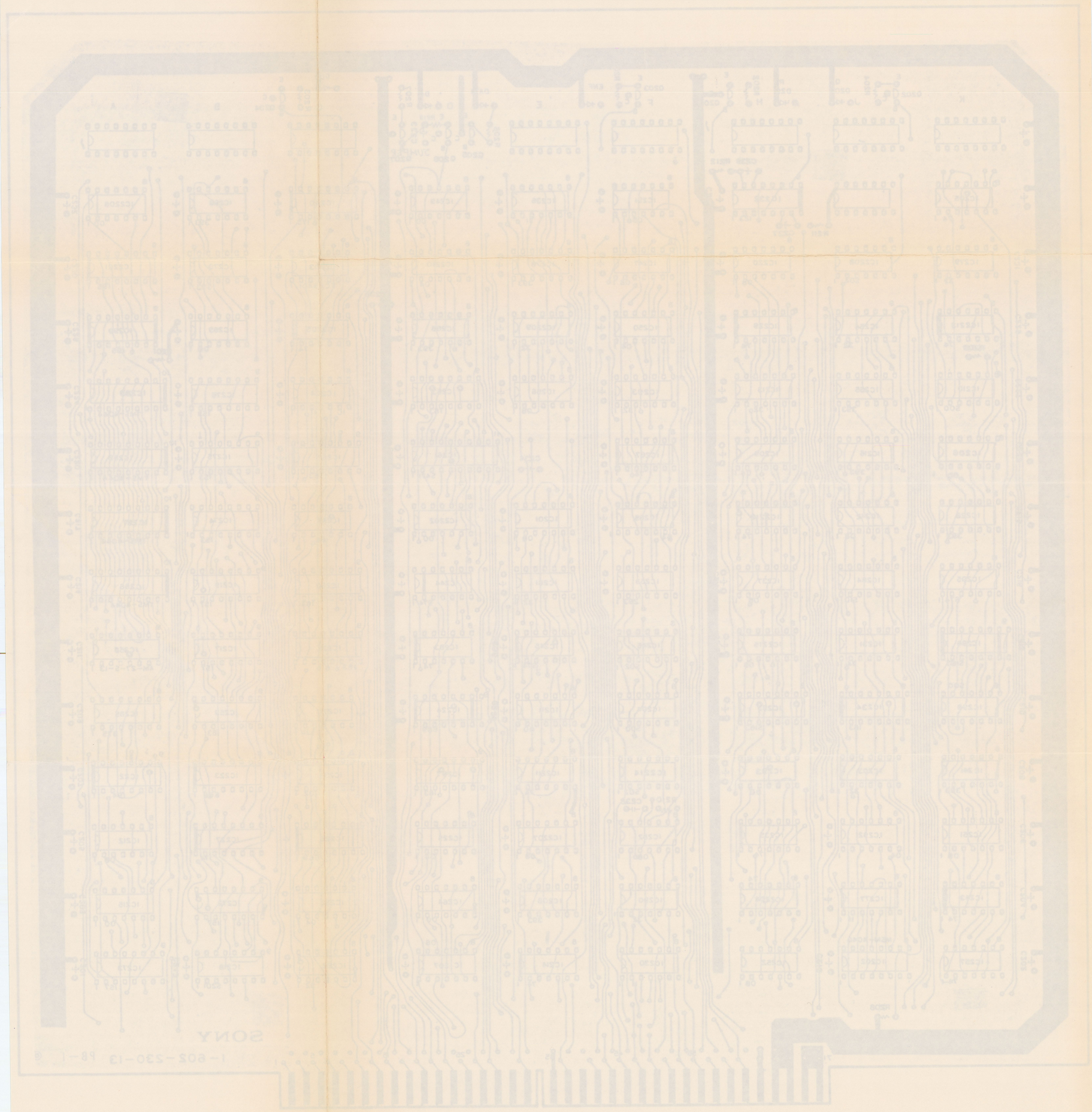
AUDIO CONTROL UNIT (PCM-10)
– MOUNT SIDE –



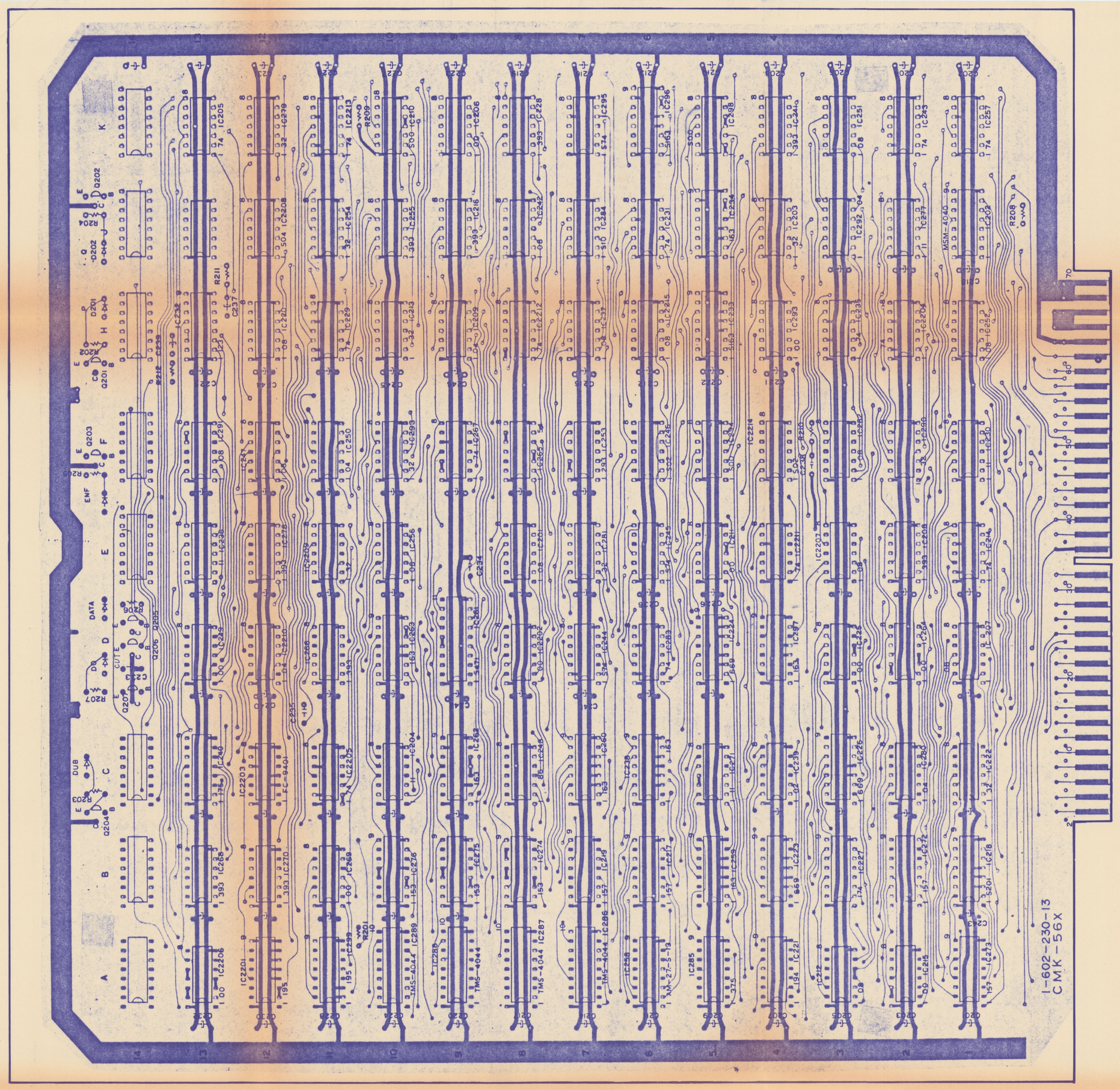


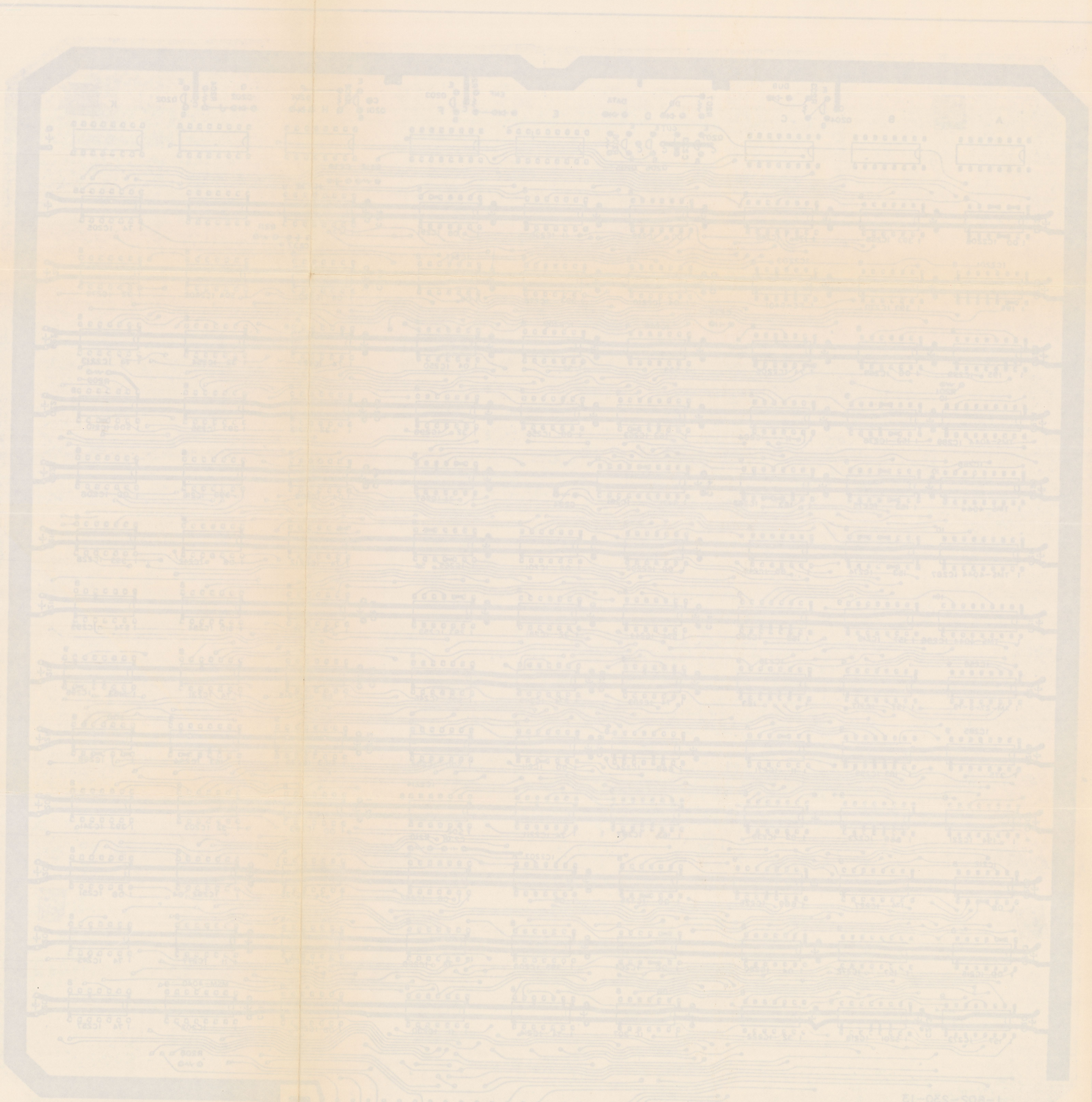
PB CONTROL UNIT (PCM-100)
– DIP SIDE –



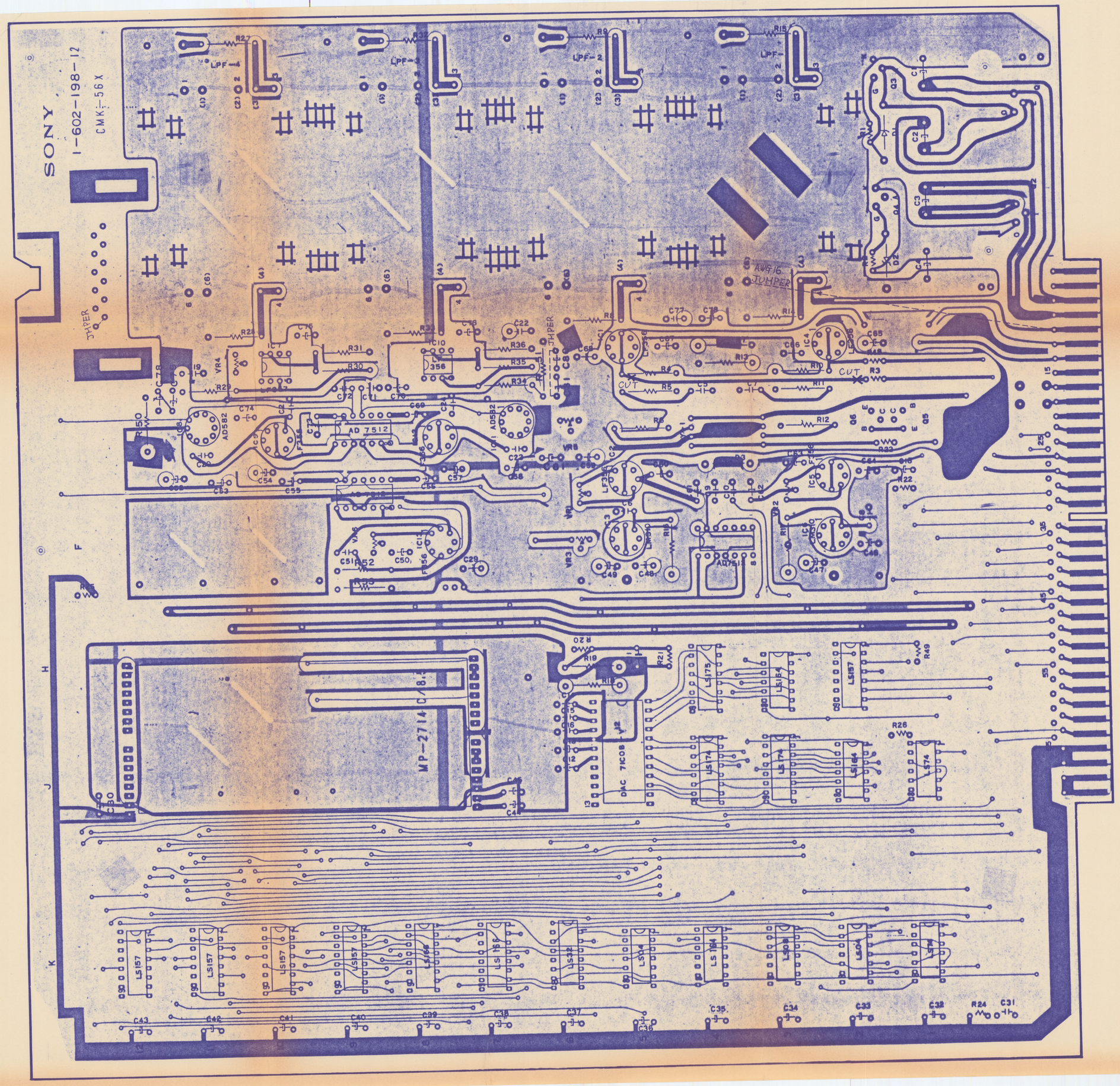


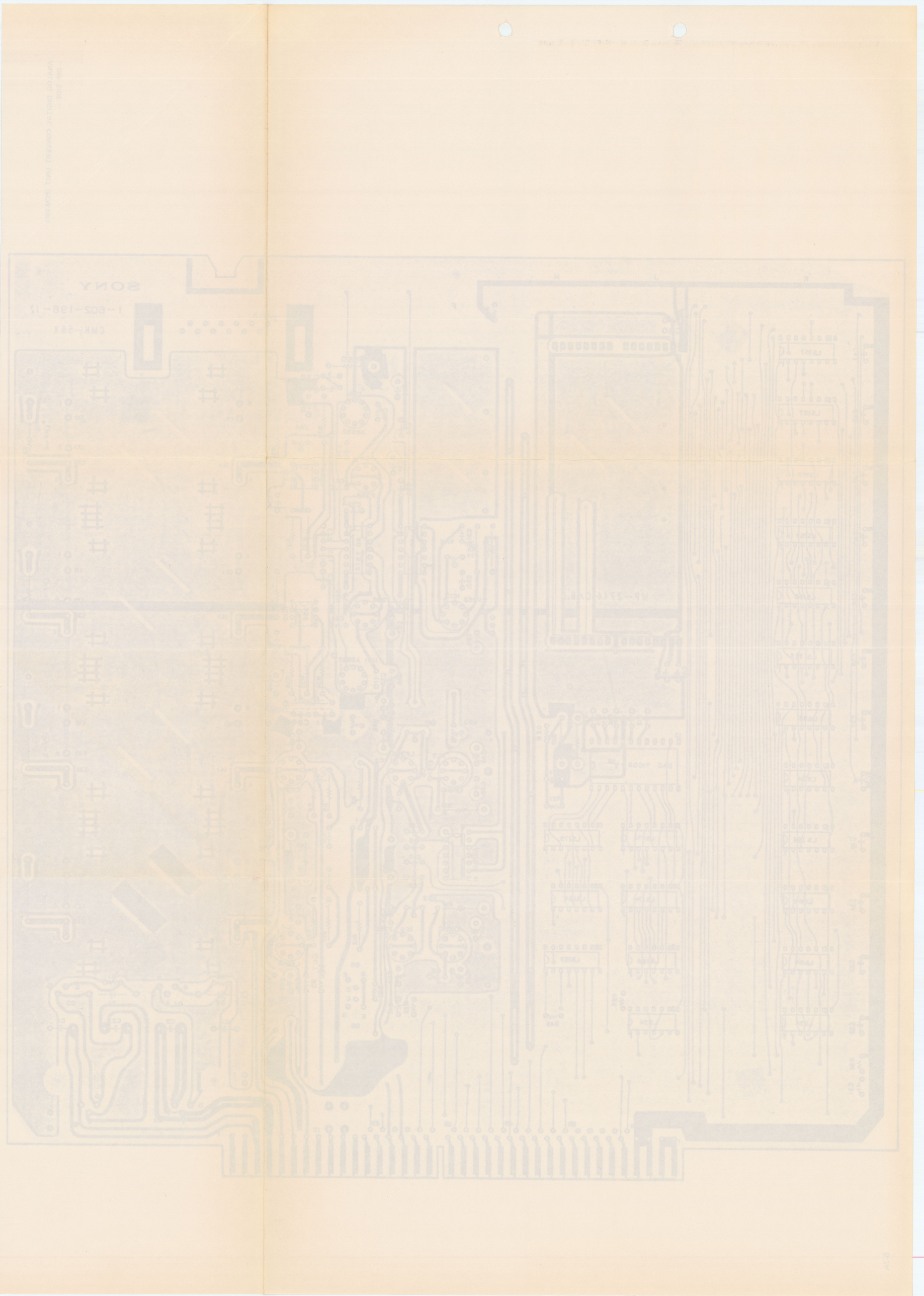
PB CONTROL UNIT (PCM-100)
– MOUNT SIDE –



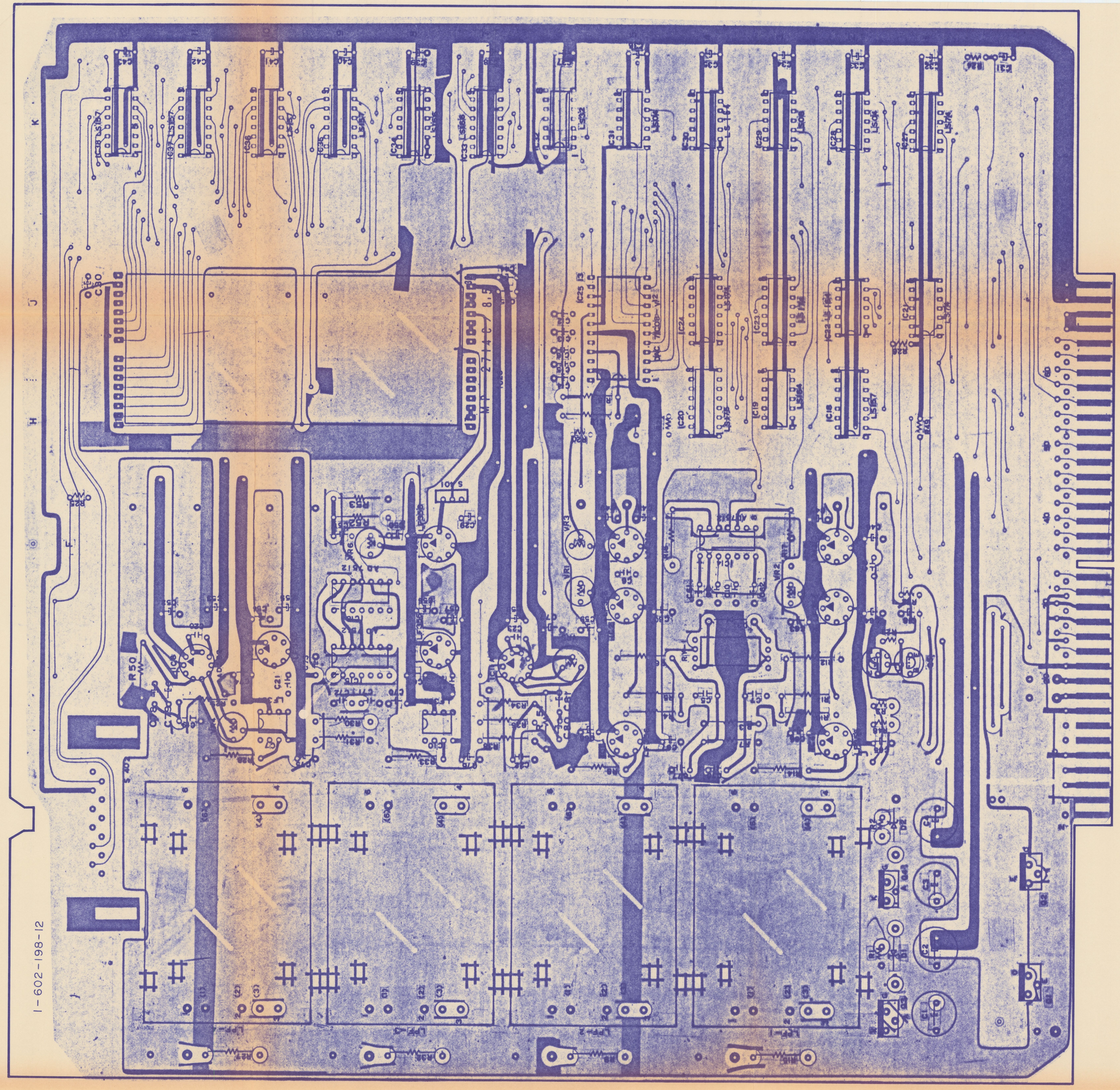


ANALOG DIGITAL CONVERT UNIT (PCM-100)
– DIP SIDE –

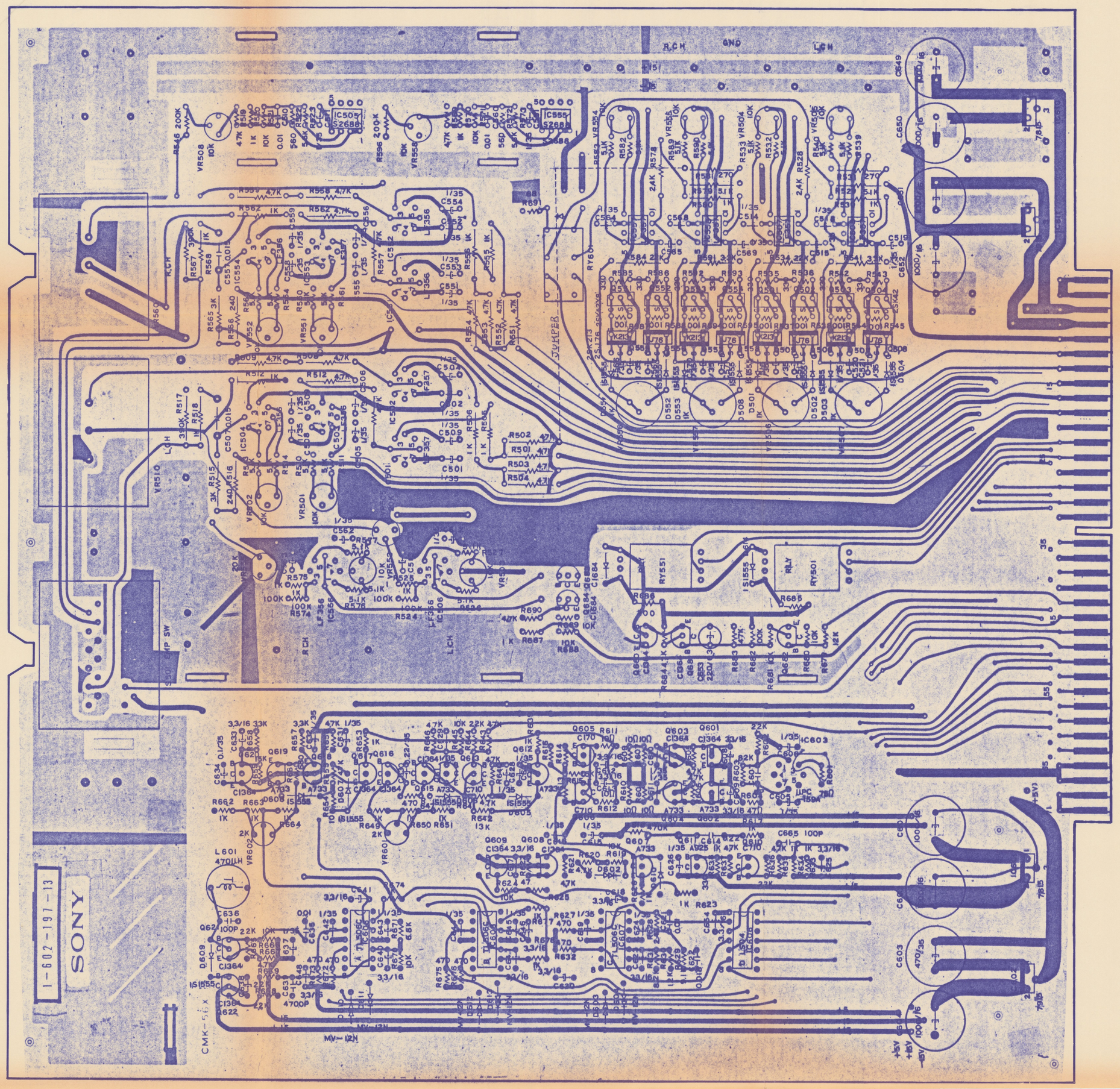




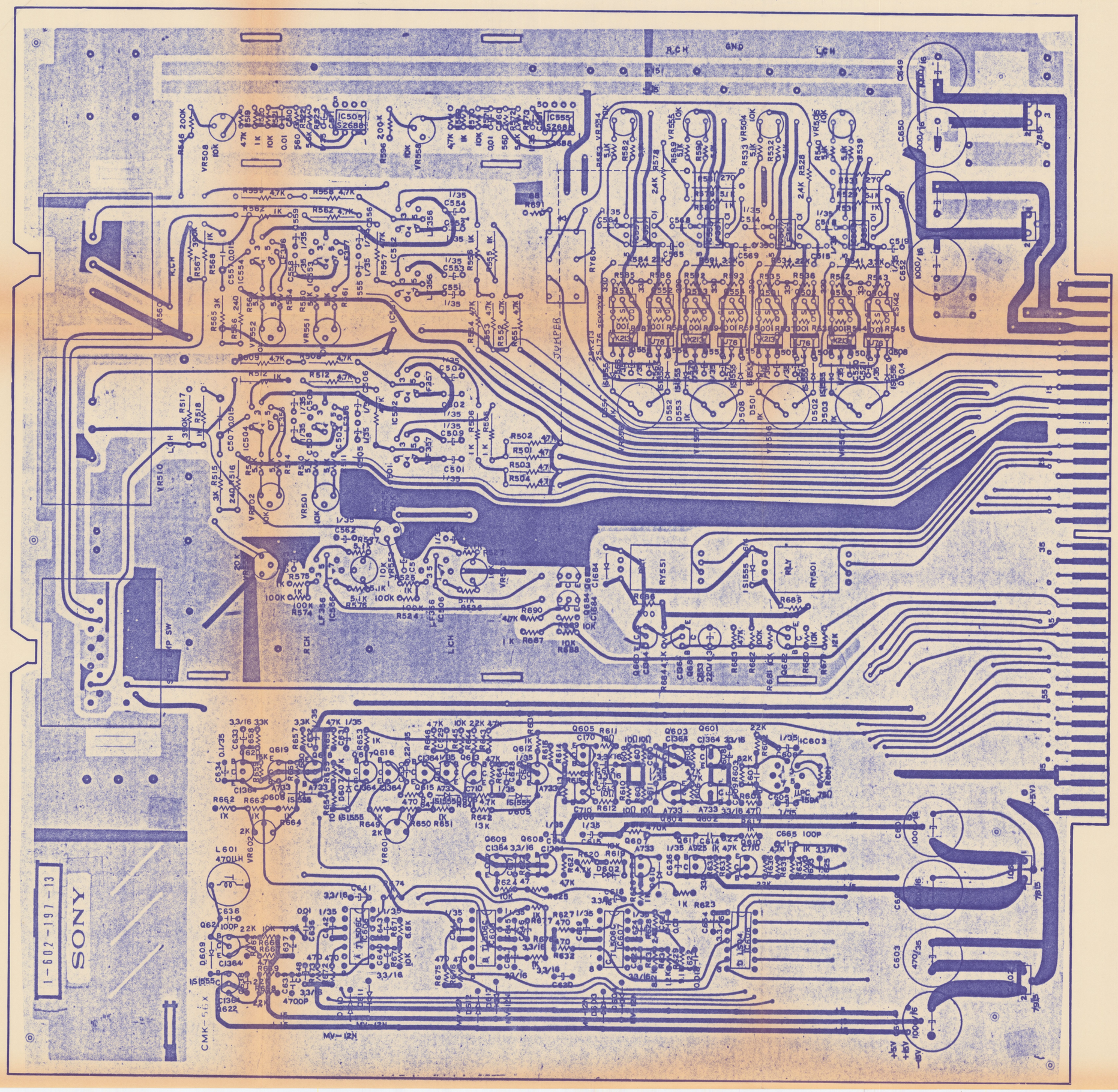
ANALOG DIGITAL CONVERT UNIT (PCM-100)
– MOUNT SIDE –

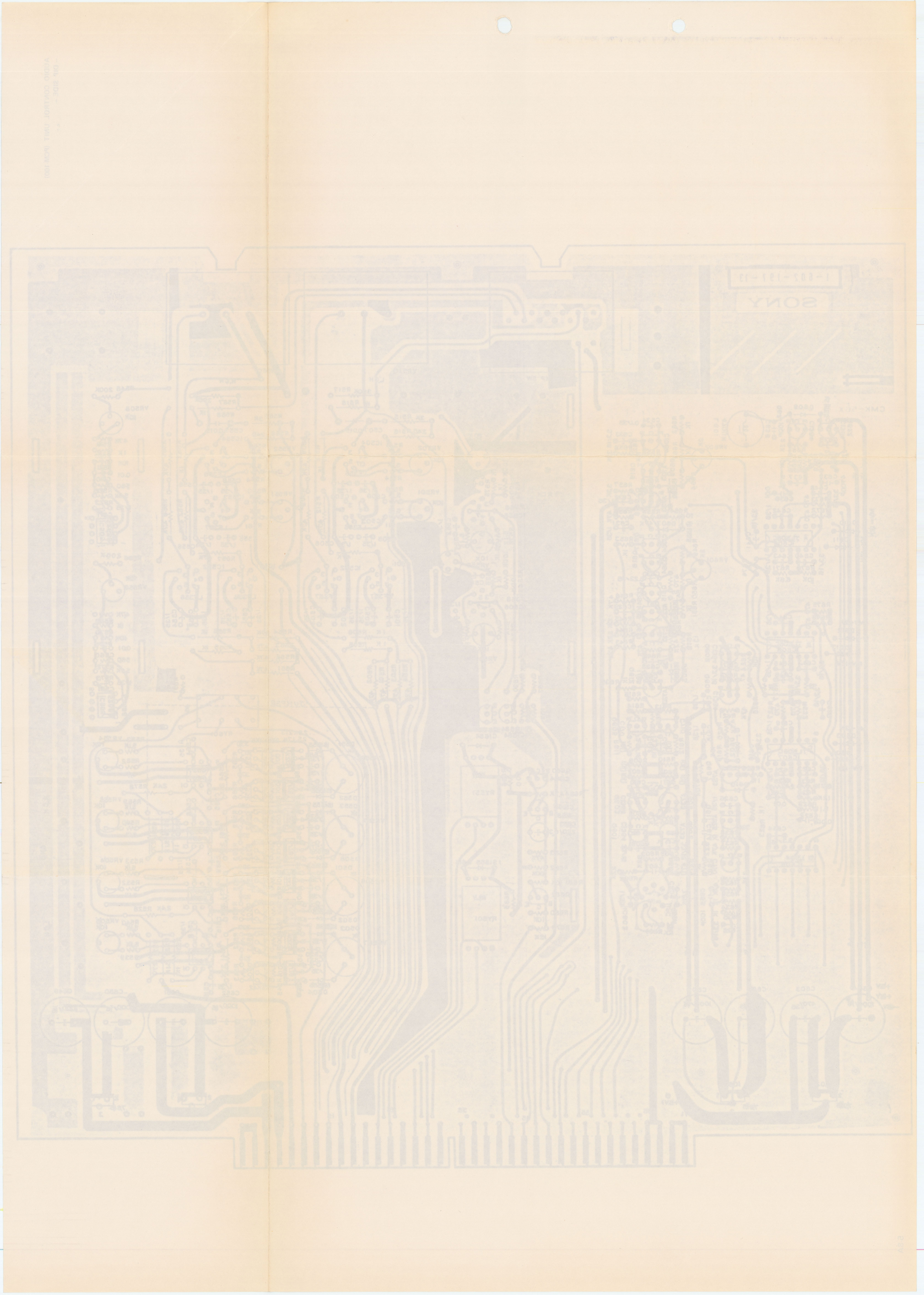


AUDIO CONTROL UNIT (PCM-100)
– DIP SIDE –

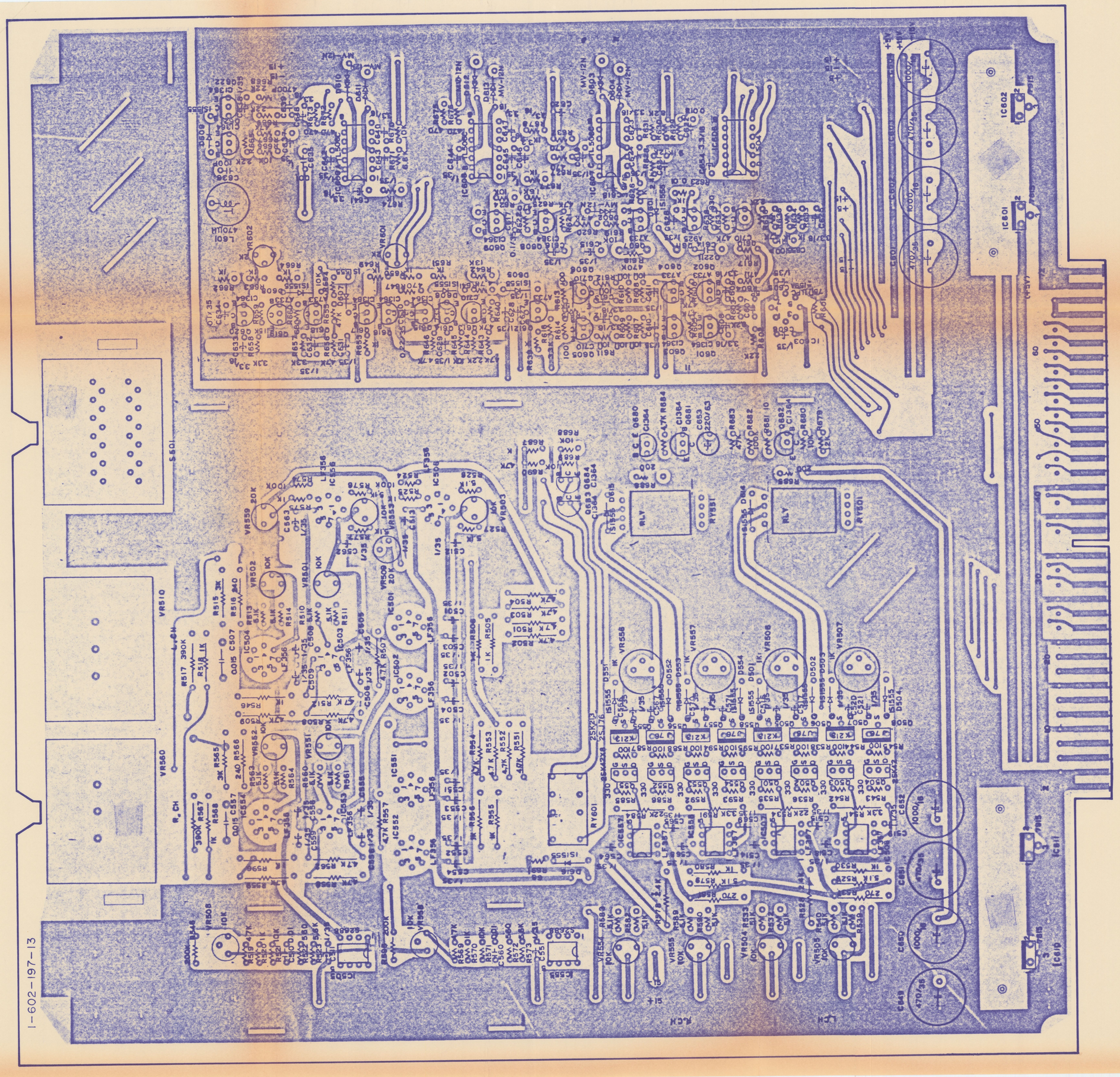


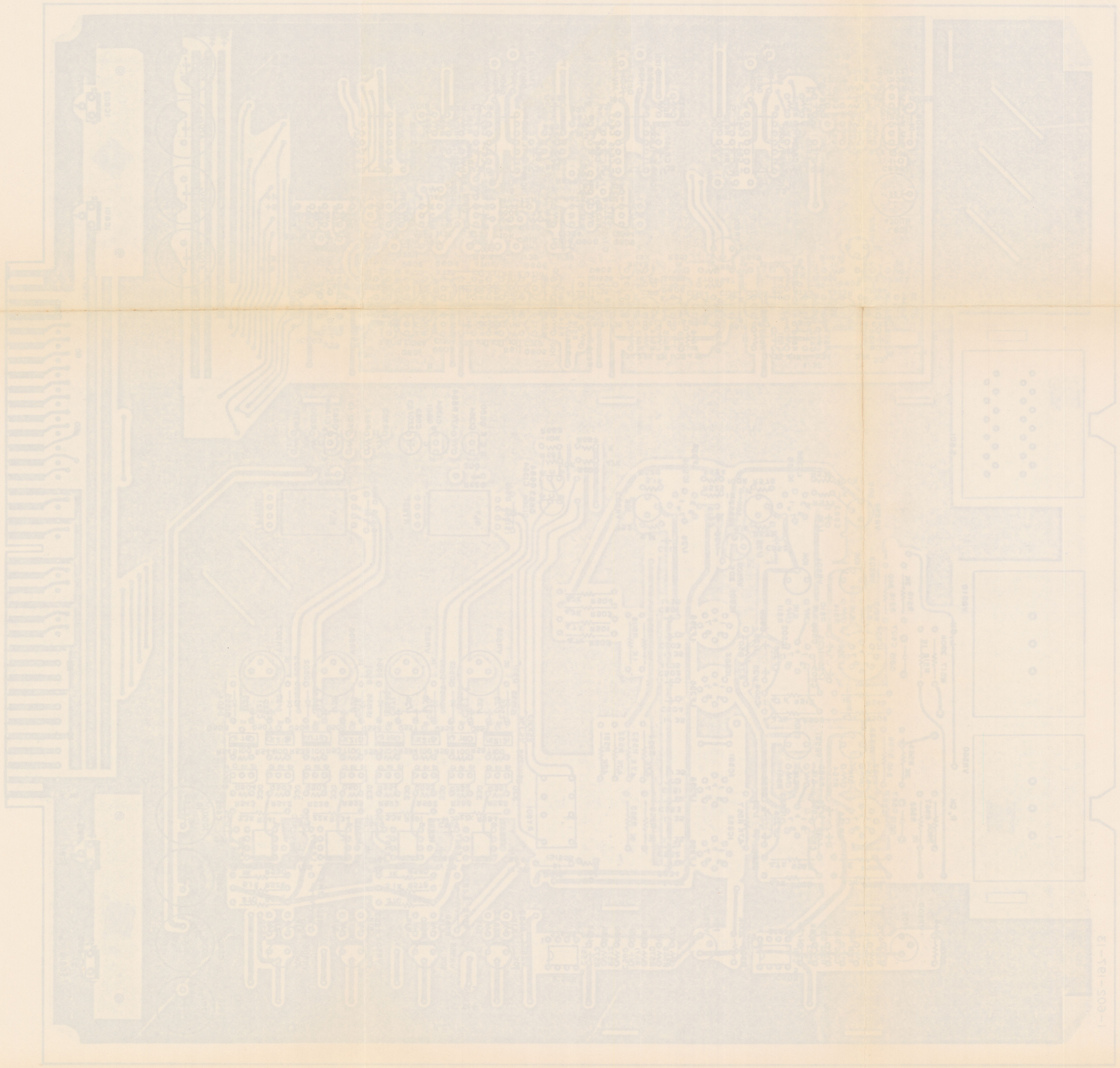
AUDIO CONTROL UNIT (PCM-100)
– DIP SIDE –



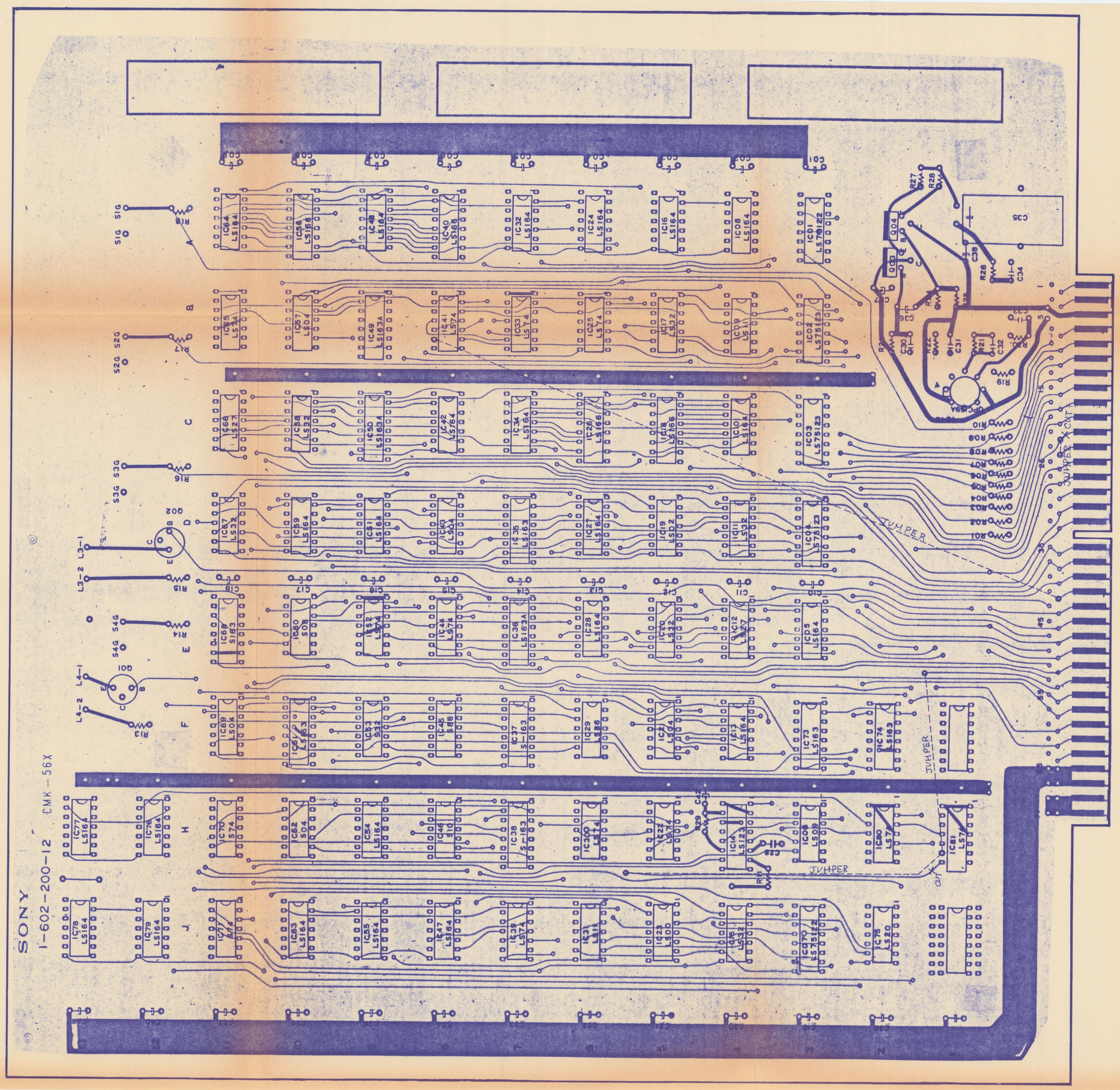


AUDIO CONTROL UNIT (PCM-100)
– MOUNT SIDE –

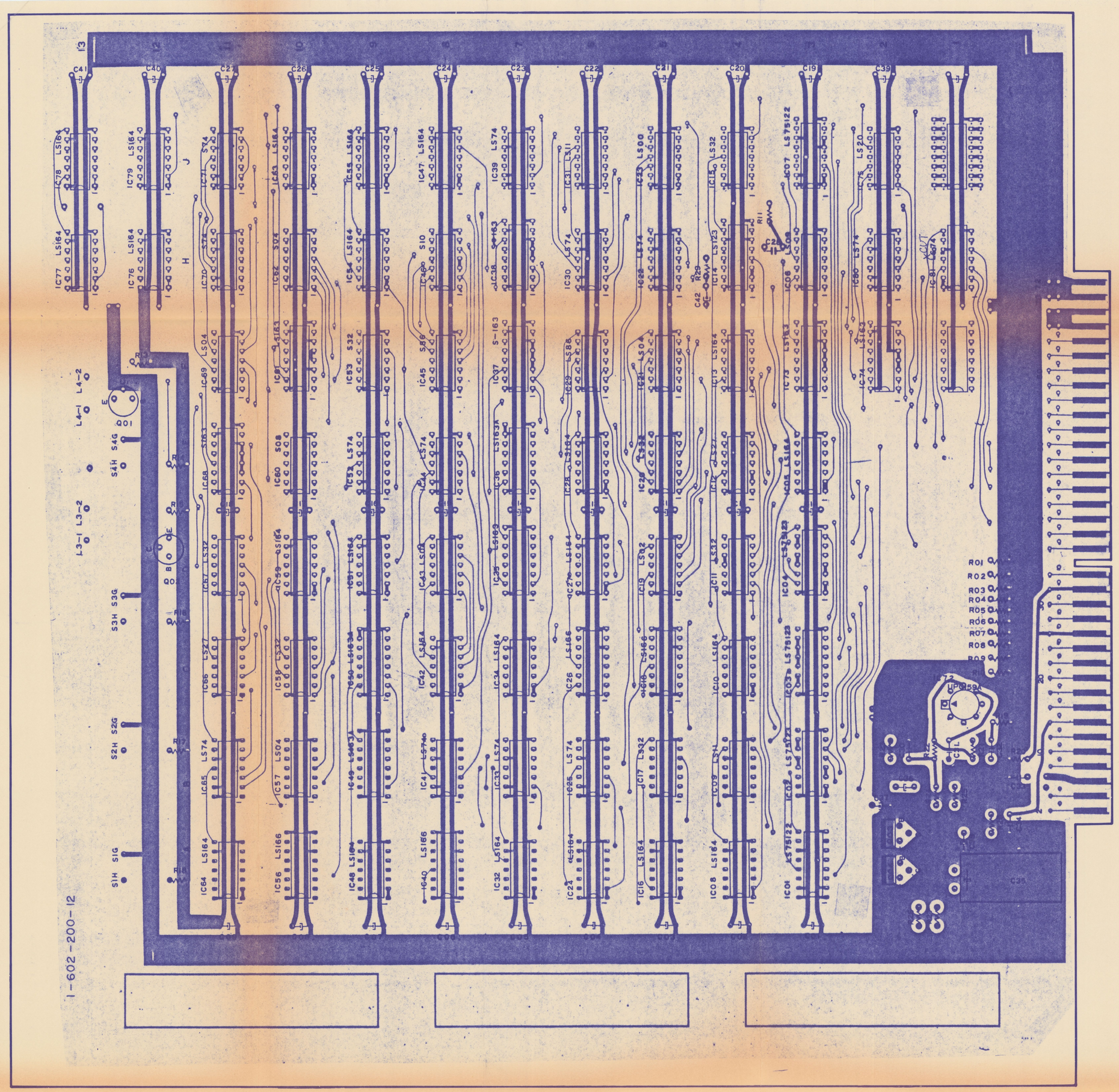


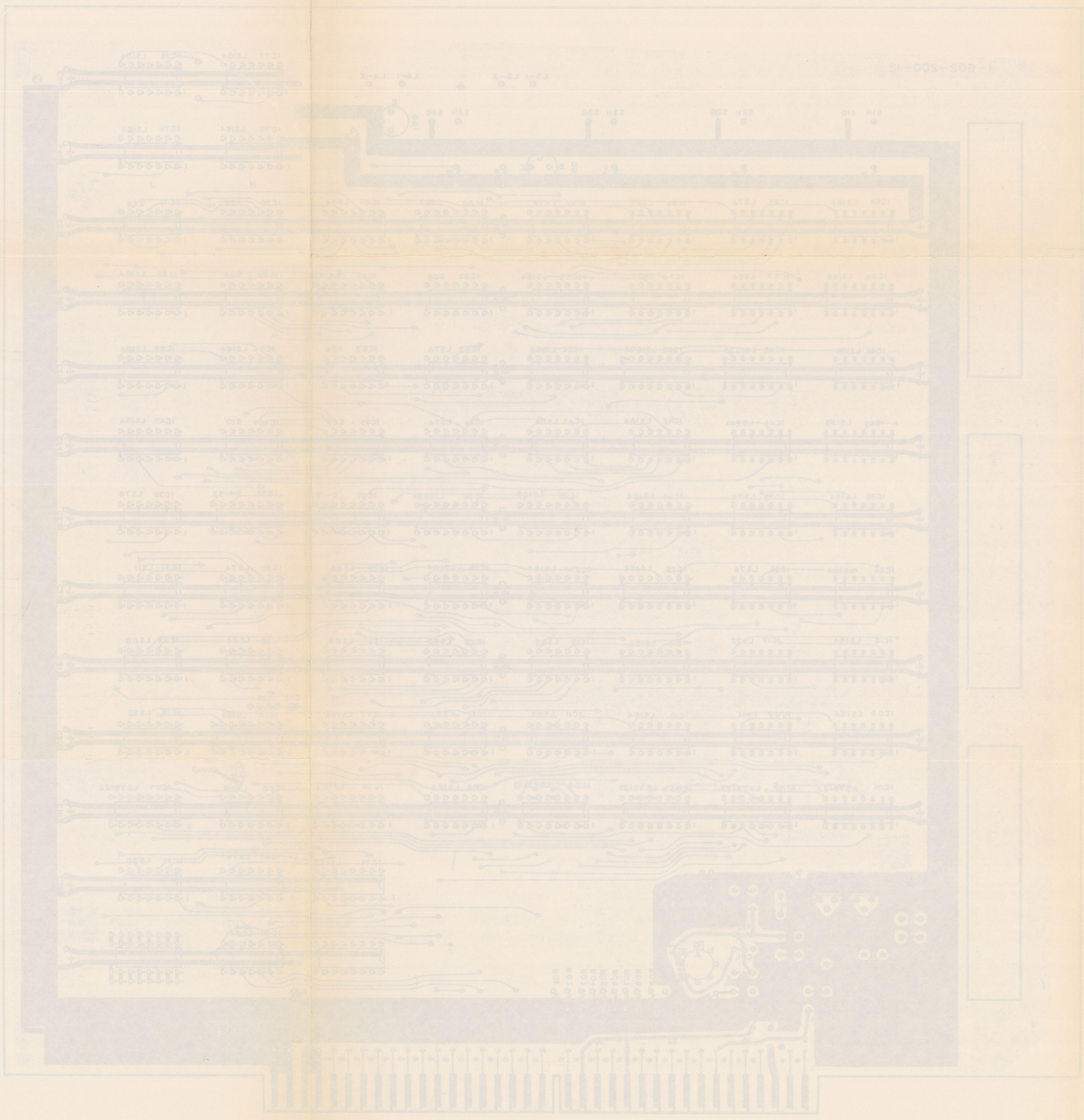


DIGITAL IN/OUT UNIT (PCM-100)
– DIP SIDE –



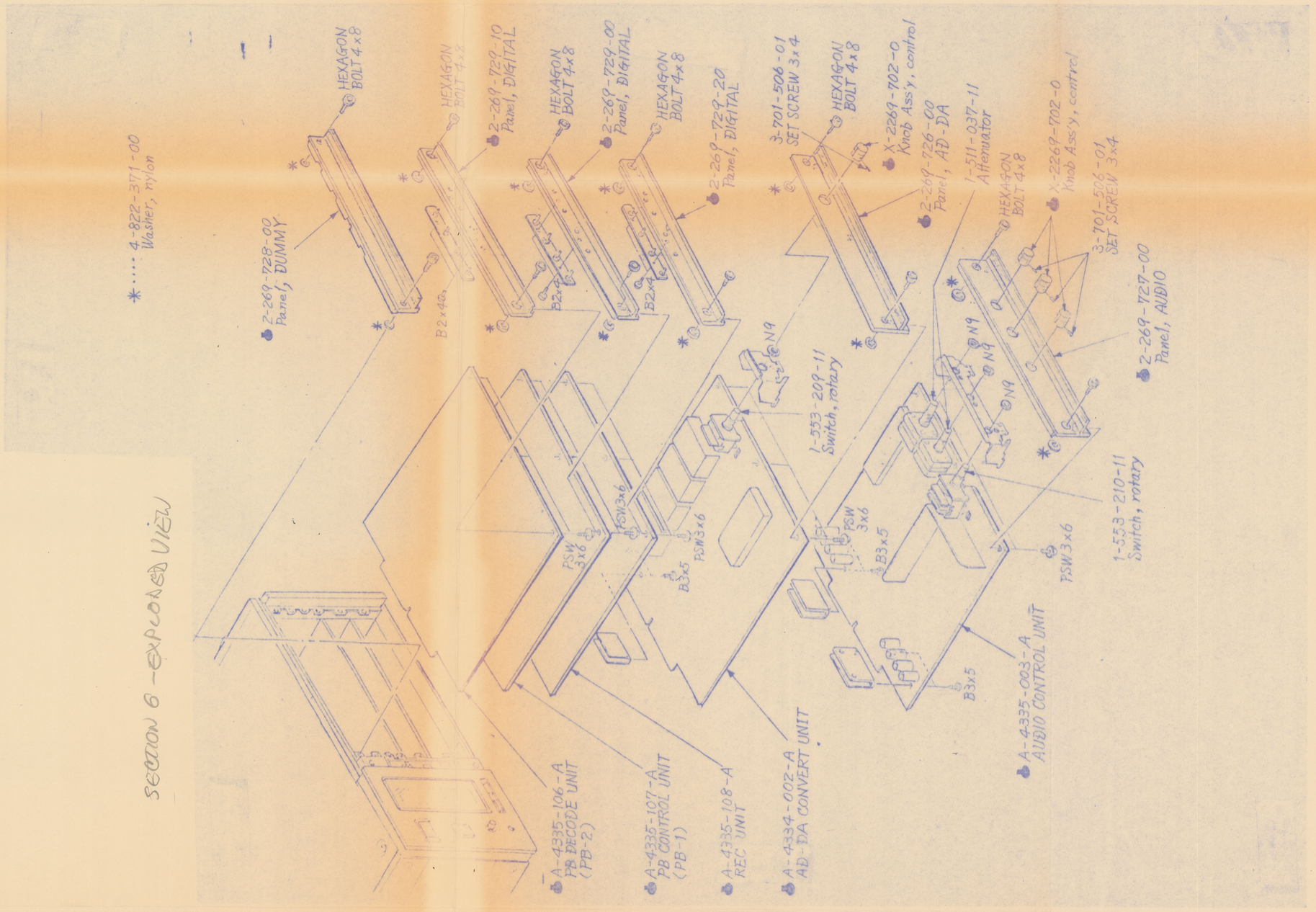
DIGITAL IN/OUT UNIT (PCM-100)
– MOUNT SIDE –

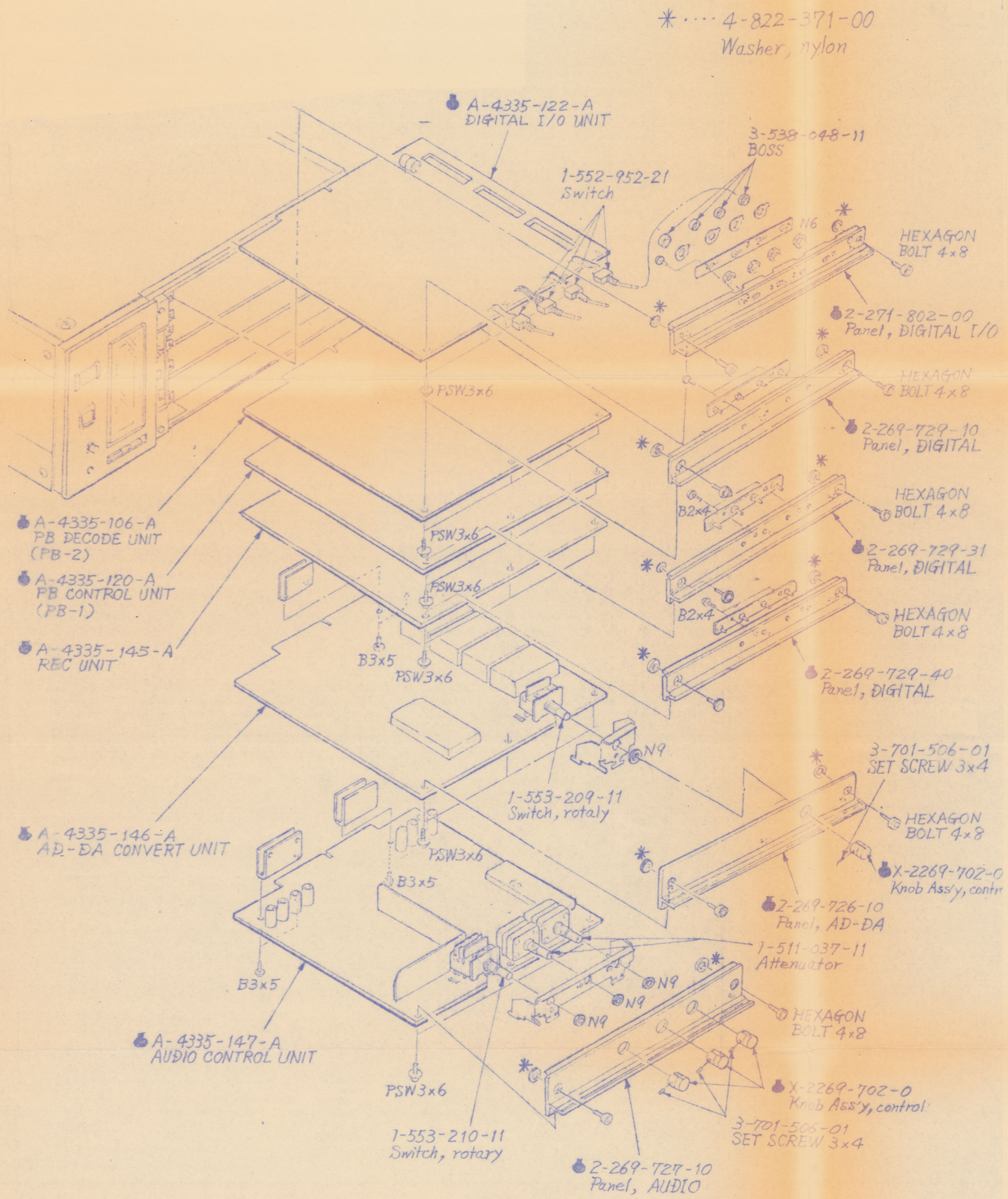




SECTION 6
EXPLODED VIEW

PRINTED BOARD (PCM-10)




* 4-822-371-00
Washer, nylon
A-4335-122-A
DIGITAL I/O UNIT
3-538-048-11
BOSS
1-552-952-21
Switch
N6
HEXAGON
BOLT 4×8
2-271-802-00
Panel, DIGITAL I/O
HEXAGON
BOLT 4×8
2-269-729-10
Panel, DIGITAL
PSW3×6
HEXAGON
BOLT 4×8
B2×4
2-269-729-31
Panel, DIGITAL
A-4335-106-A
PB DECODE UNIT
(PB-2)
PSW3×6
A-4335-120-A
PB CONTROL UNIT
(PB-1)
PSW3×6
B2×4
HEXAGON
BOLT 4×8
A-4335-145-A
REC UNIT
B3×5
PSW3×6
2-269-729-40
Panel, DIGITAL
N9
3-701-506-01
SET SCREW 3×4
1-553-209-11
Switch, rotaly
HEXAGON
BOLT 4×8
A-4335-146-A
AD-DA CONVERT UNIT
PSW3×6
X-2269-702-0
Knob Ass'y, contr
B3×5
2-269-726-10
Panel, AD-DA
1-511-037-11
Attenuator
B3×5
N9
N9
N9
HEXAGON
BOLT 4×8
A-4335-147-A
AUDIO CONTROL UNIT
PSW3×6
X-2269-702-0
Knob Ass'y, control
3-701-506-01
SET SCREW 3×4
1-553-210-11
Switch, rotary
2-269-727-10
Panel, AUDIO

SECTION 7
ELECTRICAL PARTS LIST

1. Parts printed in **Bold-Face type** are normally stocked for replacement purposes. The remaining parts shown in this manual are not normally required for routine service work. Orders for parts not shown in Bold-Face type will be processed, but allow for additional delivery time.

2. **Units of Capacitance, Inductance and Resistance**
All capacitors are in micro farads unless otherwise specified.
All inductors are in micro henries unless otherwise specified.
All resistors are in ohms.

REC UNIT

Ref. No.	Part No.	Description
	A-4335-108-A	REC UNIT (PCM-10)
	A-4335-145-A	REC UNIT (PCM-100)
C331, 340, 348, 349	1-101-004-00	CERAMIC 0.01 Z% 50V
C399	1-101-880-00	CERAMIC 47P 5% 50V
C328, 332, 397	1-101-074-00	CERAMIC 0.001 10% 50V
C392, 394	1-102-106-00	CERAMIC 100P 10% 50V
C344	1-107-067-00	MICA 18P 5% 50V
C338	1-107-071-00	MICA 27P 5% 50V
C353, 389	1-107-085-00	MICA 100P 5% 50V
C390	1-107-100-00	MICA 3P ± 0.5P 50V
C347	1-108-586-00	MYLAR 0.02 5% 50V
C339	1-123-474-00	ELECT 100 20% 10V
C327,333	1-123-488-00	ELECT 1000 20% 16V
C342	1-131-199-61	TANTAL 10 10% 16V
C355–388, 391, 398	1-131-449-00	TANTAL 3.3 20% 16V
C329, 335–337, 345, 350–352	1-131-450-00	TANTAL 1.0 20% 35V
R301, 304	1-214-104-00	METAL 68 1% 1/4W
R302, 305	1-214-108-00	METAL 100 1% 1/4W
R303, 306	1-214-112-00	METAL 150 1% 1/4W
R318, 334–337	1-214-120-00	METAL 330 1% 1/4W
R325, 326	1-214-129-00	METAL 750 1% 1/4W
R314, 319, 323, 324	1-214-132-00	METAL 1K 1% 1/4W
R313, 315, 316, 317	1-214-140-00	METAL 2.2K 1% 1/4W
R307	1-214-142-00	METAL 2.7K 1% 1/4W
R309	1-214-143-00	METAL 3.0K 1% 1/4W
R327, 338	1-214-148-00	METAL 4.7K 1% 1/4W
R310	1-214-152-00	METAL 6.8K 1% 1/4W
R320, 328	1-214-156-00	METAL 10K 1% 1/4W
R321	1-214-158-00	METAL 12K 1% 1/4W
R311	1-214-161-00	METAL 16K 1% 1/4W
R312	1-214-163-00	METAL 20K 1% 1/4W
R308	1-214-172-00	METAL 47K 1% 1/4W
R322, 329–333, 339	1-214-180-00	METAL 100K 1% 1/4W
L301	1-407-163-11	MICRO INDUCTOR 33μH 10%
D303	8-719-815-55	1S1555
D101–104	8-719-301-03	SEL 103R
D301, 302	8-719-931-06	EQB01-06
Q301, 302, 309	8-729-163-47	2SC1634-P
Q305–308	8-729-387-27	2SA872-D
Q303, 304	8-729-671-14	2SC710-14
IC377	8-759-040-44	MC4044P
IC301	8-759-115-90	μPC159A
IC329	8-759-752-50	S471NRECS
IC376	8-759-752-52	MB7052RECA
IC302, 304, 313, 320, 323, 326, 342, 351, 363, 381, 382, 390, 391	8-759-900-00	SN74LS00N
IC318, 324, 335, 360, 370	8-759-900-08	SN74LS08N
IC341, 371	8-759-900-10	SN74LS10N
IC308	8-759-900-11	SN74LS11N
IC321	8-759-900-14	SN74LS14N
IC358	8-759-900-20	SN74LS20N
IC305	8-759-900-30	SN74LS30N
IC310, 325, 346, 361	8-759-900-32	SN74LS32N
IC319, 327, 348	8-759-900-51	SN74LS51N
IC303, 307, 312, 314, 315, 316, 322, 331, 339, 340, 369, 392, 393, 396	8-759-900-74	SN74LS74AN
IC334, 380, 394	8-759-900-86	SN74LS86N

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C328, 332, 397	1-101-074-00	CERAMIC 0.001 10% 50V
C392, 394	1-102-106-00	CERAMIC 100P 10% 50V
C344	1-107-067-00	MICA 18P 5% 50V
C338	1-107-071-00	MICA 27P 5% 50V
C353, 389	1-107-085-00	MICA 100P 5% 50V
C390	1-107-100-00	MICA 3P ± 0.5P 50V
C347	1-108-586-00	MYLAR 0.02 5% 50V
C339	1-123-474-00	ELECT 100 20% 10V
C327,333	1-123-488-00	ELECT 1000 20% 16V
C342	1-131-199-61	TANTAL 10 10% 16V
C355–388, 391, 398	1-131-449-00	TANTAL 3.3 20% 16V
C329, 335–337, 345, 350–352	1-131-450-00	TANTAL 1.0 20% 35V
R301, 304	1-214-104-00	METAL 68 1% 1/4W
R302, 305	1-214-108-00	METAL 100 1% 1/4W
R303, 306	1-214-112-00	METAL 150 1% 1/4W
R318, 334–337	1-214-120-00	METAL 330 1% 1/4W
R325, 326	1-214-129-00	METAL 750 1% 1/4W
R314, 319, 323, 324	1-214-132-00	METAL 1K 1% 1/4W
R313, 315, 316, 317	1-214-140-00	METAL 2.2K 1% 1/4W
R307	1-214-142-00	METAL 2.7K 1% 1/4W
R309	1-214-143-00	METAL 3.0K 1% 1/4W
R327, 338	1-214-148-00	METAL 4.7K 1% 1/4W
R310	1-214-152-00	METAL 6.8K 1% 1/4W
R320, 328	1-214-156-00	METAL 10K 1% 1/4W
R321	1-214-158-00	METAL 12K 1% 1/4W
R311	1-214-161-00	METAL 16K 1% 1/4W
R312	1-214-163-00	METAL 20K 1% 1/4W
R308	1-214-172-00	METAL 47K 1% 1/4W
R322, 329–333, 339	1-214-180-00	METAL 100K 1% 1/4W
L301	1-407-163-11	MICRO INDUCTOR 33μH 10%
D303	8-719-815-55	1S1555
D101–104	8-719-301-03	SEL 103R
D301, 302	8-719-931-06	EQB01-06
Q301, 302, 309	8-729-163-47	2SC1634-P
Q305–308	8-729-387-27	2SA872-D
Q303, 304	8-729-671-14	2SC710-14
IC377	8-759-040-44	MC4044P
IC301	8-759-115-90	μPC159A
IC329	8-759-752-50	S471NRECS
IC376	8-759-752-52	MB7052RECA
IC302, 304, 313, 320, 323, 326, 342, 351, 363, 381, 382, 390, 391	8-759-900-00	SN74LS00N
IC318, 324, 335, 360, 370	8-759-900-08	SN74LS08N
IC341, 371	8-759-900-10	SN74LS10N
IC308	8-759-900-11	SN74LS11N
IC321	8-759-900-14	SN74LS14N
IC358	8-759-900-20	SN74LS20N
IC305	8-759-900-30	SN74LS30N
IC310, 325, 346, 361	8-759-900-32	SN74LS32N
IC319, 327, 348	8-759-900-51	SN74LS51N
IC303, 307, 312, 314, 315, 316, 322, 331, 339, 340, 369, 392, 393, 396	8-759-900-74	SN74LS74AN
IC334, 380, 394	8-759-900-86	SN74LS86N

SECTION 7
ELECTRICAL PARTS LIST

1. Parts printed in **Bold-Face type** are normally stocked for replacement purposes. The remaining parts shown in this manual are not normally required for routine service work. Orders for parts not shown in Bold-Face type will be processed, but allow for additional delivery time.

Ref. No.	Part No.	Description
REC UNIT		
	A-4335-108-A	REC UNIT (PCM-10)
	A-4335-145-A	REC UNIT (PCM-100)
C231, 240, 248, 249		
	1-101-004-00	CERAMIC 0.01 2% 50V
C299	1-101-880-00	CERAMIC 47P 5% 50V
C228, 232, 297		
	1-101-074-00	CERAMIC 0.001 10% 50V
C292, 294	1-102-106-00	CERAMIC 100P 10% 50V
C244	1-107-087-00	MICA 18P 5% 50V
C238	1-107-071-00	MICA 27P 5% 50V
C283, 289	1-107-085-00	MICA 100P 5% 50V
C290	1-107-100-00	MICA 3P ± 0.5P 50V
C247	1-108-588-00	MYLAR 0.02 5% 50V
C239	1-123-474-00	ELECT 100 20% 10V
C227, 233	1-123-488-00	ELECT 1000 20% 16V
C242	1-131-199-61	TANTAL 10 10% 16V
C258–288, 291, 298		
	1-131-449-00	TANTAL 3.3 20% 16V
C229, 235–237, 245, 250–252		
	1-131-450-00	TANTAL 1.0 20% 35V
R301, 304	1-214-104-00	METAL 68 1% 1/4W
R302, 305	1-214-108-00	METAL 100 1% 1/4W
R303, 306	1-214-112-00	METAL 150 1% 1/4W
R318, 334–337		
	1-214-120-00	METAL 330 1% 1/4W
R325, 326	1-214-129-00	METAL 750 1% 1/4W
R314, 319, 323, 324		
	1-214-132-00	METAL 1K 1% 1/4W
R313, 315, 316, 317		
	1-214-140-00	METAL 2.2K 1% 1/4W
R307	1-214-142-00	METAL 2.7K 1% 1/4W
R309	1-214-143-00	METAL 3.0K 1% 1/4W
R327, 328	1-214-148-00	METAL 4.7K 1% 1/4W
R310	1-214-152-00	METAL 6.8K 1% 1/4W
R320, 329	1-214-156-00	METAL 10K 1% 1/4W
R321	1-214-158-00	METAL 12K 1% 1/4W
R311	1-214-161-00	METAL 16K 1% 1/4W
R312	1-214-163-00	METAL 20K 1% 1/4W

2. **Units of Capacitance, Inductance and Resistance**
All capacitors are in micro farads unless otherwise specified.
All inductors are in micro henries unless otherwise specified.
All resistors are in ohms.

Ref. No.	Part No.	Description
R308	1-214-172-00	METAL 47K 1% 1/4W
R322, 329–333, 339		
	1-214-180-00	METAL 100K 1% 1/4W
L301	1-407-163-11	MICRO INDUCTOR 33μH 10%
D303	8-719-815-55	1S1555
D101–104	8-719-301-03	SEL 103R
D201, 202	8-719-931-06	EQB01-06
Q201, 202, 209		
	8-729-163-47	2SC1634-P
Q205–208		
	8-729-387-27	2SA872-D
Q203, 204	8-729-671-14	2SC710-14
IC277	8-759-040-44	MC4044P
IC201	8-759-115-90	μPC159A
IC229	8-759-752-50	S4211NREC5
IC276	8-759-752-52	MB7052REC4
IC202, 204, 213, 220, 223, 226, 242, 251, 263, 281, 282, 290, 291		
	8-759-900-00	SN74LS00N
IC218, 224, 235, 260, 270		
	8-759-900-08	SN74LS08N
IC241, 271		
	8-759-900-10	SN74LS10N
IC208	8-759-900-11	SN74LS11N
IC221	8-759-900-14	SN74LS14N
IC258	8-759-900-20	SN74LS20N
IC205	8-759-900-30	SN74LS30N
IC210, 225, 246, 261		
	8-759-900-32	SN74LS32N
IC219, 227, 248		
	8-759-900-51	SN74LS51N
IC203, 207, 212, 214, 215, 216, 222, 231, 239, 240, 269, 292, 293, 296		
	8-759-900-74	SN74LS74AN
IC234, 280, 294		
	8-759-900-86	SN74LS86N

Ref. No.	Part No.	Description
IC372	8-759-901-07	SN74LS107AN
IC336, 379	8-759-901-23	SN74LS123N
IC347	8-759-901-53	SN74LS153N
IC345, 362, 375, 385	8-759-901-57	SN74LS157N
IC343	8-759-901-61	74LS161AN
IC311, 332, 333, 352, 353, 395	8-759-901-64	SN74LS164N
IC354	8-759-901-66	SN74LS166N
IC309, 337, 349	8-759-901-74	SN74LS174N
IC328	8-759-901-75	SN74LS175N
IC350, 368	8-759-902-93	SN74LS293N
IC364, 365, 366	8-759-903-74	SN74LS374N
IC306	8-759-904-40	MSM4040
IC373, 374	8-759-906-68	SN74LS668N
IC330, 338, 359, 383, 384	8-759-906-69	SN74LS669N
IC355	8-759-910-00	SN74S00N
IC357	8-759-910-04	SN74S04N
IC367	8-759-911-24	SN74S124N
IC356	8-759-911-63	SN74S163N
IC344	8-759-911-89	SN74S189N
IC386–389	8-759-991-14	MB8114NL
IC317	8-759-994-01	9401PC

PB DECODE UNIT (PB-2)

Ref. No.	Part No.	Description
	A-4335-106-A	PB DECODE UNIT (PB-2) (PCM10/100)
C131, 132	1-102-106-00	CERAMIC 100P 10% 50V
C127–130	1-131-209-61	TANTAL 0.1 10% 35V
C101–126	1-131-449-00	TANTAL 3.3 20% 16V
R110–113	1-214-116-00	METAL 220 1% 1/4W
R101–109	1-214-132-00	METAL 1K 1% 1/4W
Q101–108	8-729-387-27	2SA872-D
IC156	8-759-752-49	SN74S471NDEC2
IC161	8-759-752-51	MB70552DEC1
IC118	8-759-752-53	MB7052MAT
IC138, 150, 177	8-759-900-00	SN74LS00N
IC185	8-759-900-02	SN74LS02N
IC112, 126, 164, 168, 178	8-759-900-04	SN74LS04N
IC108, 114, 123, 125, 129, 140, 145, 147, 151, 162, 165, 174, 179, 190, 193	8-759-900-08	SN74LS08N
IC101, 107, 116, 133, 136, 153	8-759-900-11	SN74LS11N
IC167	8-759-900-14	SN74LS14N
IC188	8-759-900-21	SN74LS21N
IC119	8-759-900-30	SN74LS30N
IC109, 120, 124, 131, 135, 152, 157, 176, 189, 191, 192	8-759-900-32	SN74LS32N
IC103, 104, 105, 106, 113, 122, 127, 128, 130, 134, 139, 141, 154, 166, 175, 186, 194	8-759-900-74	SN74LS74AN
IC146, 171	8-759-900-86	SN74LS86N
IC173, 184	8-759-901-53	SN74LS153N
IC117, 142, 143, 160, 172, 182, 183	8-759-901-64	SN74LS164N

Ref. No.	Part No.	Description
IC372	8-759-901-07	SN74LS107AN
IC336, 379	8-759-901-23	SN74LS123N
IC347	8-759-901-53	SN74LS153N
IC346, 362, 375, 385	8-759-901-57	SN74LS157N
IC343	8-759-901-61	74LS161AN
IC311, 332, 333, 352, 363, 365	8-759-901-64	SN74LS164N
IC364	8-759-901-66	SN74LS166N
IC309, 337, 349	8-759-901-74	SN74LS174N
IC328	8-759-901-75	SN74LS175N
IC350, 368	8-759-902-93	SN74LS293N
IC364, 365, 366	8-759-903-74	SN74LS374N
IC306	8-759-904-40	MSM4040
IC373, 374	8-759-908-68	SN74LS568N
IC330, 338, 359, 363, 364	8-759-908-69	SN74LS569N
IC355	8-759-910-00	SN74S00N
IC357	8-759-910-04	SN74S04N
IC367	8-759-911-24	SN74S124N
IC356	8-759-911-63	SN74S163N
IC344	8-759-911-89	SN74S189N
IC386–389	8-759-991-14	MB8114NL
IC317	8-759-994-01	940TPC

Ref. No.	Part No.	Description
PB DECODE UNIT (PB-2)		
A-4335-106-A	PB DECODE UNIT (PB-2) (PCM10/100)	
C131, 132	1-102-106-00	CERAMIC 100P 10% 50V
C127–130	1-131-209-61	TANTAL 0.1 10% 35V
C101–126	1-131-449-00	TANTAL 3.3 20% 16V
R110–113	1-214-116-00	METAL 220 1% 1/4W
R101–109	1-214-132-00	METAL 1K 1% 1/4W
Q101–108	8-729-387-27	2SA872-D
IC156	8-759-752-49	SN74S471NDEC2
IC161	8-759-752-51	MB7058ZDEC1
IC118	8-759-752-53	MB7082MAT
IC138, 150, 177	8-759-900-00	SN74LS00N
IC185	8-759-900-02	SN74LS02N
IC112, 128, 164, 168, 178	8-759-900-04	SN74LS04N
IC108, 114, 123, 125, 129, 140, 145, 147, 151, 162, 165, 174, 179, 190, 193	8-759-900-08	SN74LS08N
IC101, 107, 116, 133, 136, 153	8-759-900-11	SN74LS11N
IC167	8-759-900-14	SN74LS14N
IC188	8-759-900-21	SN74LS21N
IC119	8-759-900-30	SN74LS30N
IC109, 120, 124, 131, 135, 152, 157, 176, 189, 191, 192	8-759-900-32	SN74LS32N
IC103, 104, 105, 106, 113, 122, 127, 128, 130, 134, 139, 141, 164, 166, 175, 186, 194	8-759-900-74	SN74LS74AN
IC146, 171	8-759-900-86	SN74LS86N
IC173, 184	8-759-901-53	SN74LS153N
IC117, 142, 143, 160, 172, 182, 183	8-759-901-64	SN74LS164N

Ref. No.	Part No.	Description
IC102, 187		
	8-759-901-74	SN74LS174N
IC155	8-759-901-75	SN74LS175N
IC137	8-759-901-93	SN74LS193N
IC148, 158, 169, 180		
	8-759-901-94	SN74LS194AN
IC149, 159, 170, 181		
	8-759-902-66	SN74LS266N
IC115	8-759-903-75	SN74LS375N
IC121, 132		
	8-759-904-40	MSM4040
IC144, 163		
	8-759-910-86	SN74S86N
IC110	8-759-912-01	SN74S201N
IC111	8-759-974-80	SN7480N
D101–104	8-719-301-03	SEL103R

Ref. No.	Part No.	Description

PB CONTROL UNIT (PB-1)

	A-4335-107-A	PB CONTROL UNIT (PB-1) (PCM-10)
C234, 238	1-102-106-00	CERAMIC 100P 10% 50V
C235	1-102-123-00	CERAMIC 0.0033 10% 50V
C233, 237	1-131-209-61	TANTAL 0.1 10% 35V
C239	1-131-380-21	TANTAL 33 10% 10V
C201–232, 236 240–243		
	1-131-449-00	TANTAL 3.3 20% 16V
R210	1-214-109-00	METAL 110 1% 1/4W
R207	1-214-116-00	METAL 220 1% 1/4W
R202–206	1-214-120-00	METAL 330 1% 1/4W
R201, 208, 209		
	1-214-132-00	METAL 1K 1% 1/4W
R211, 212	1-214-172-00	METAL 47K 1% 1/4W
D101–104, 201, 202		
	8-719-301-03	SEL103R
Q201–207	8-729-387-27	2SA872-D
IC261	8-759-752-48	SN74S471NSYNC
IC211, 215, 225, 232, 249, 264, 269, 293, 2202, 2206		
	8-759-900-00	SN74LS00N
IC239	8-759-900-02	SN74LS02N
IC209, 250, 280, 292, 2210		
	8-759-900-04	SN74LS04N
IC201, 207, 212, 220, 237, 242, 247, 251, 252, 256, 282, 291, 2212, 2213		
	8-759-900-08	SN74LS08N
IC204, 230, 236, 271, 277		
	8-759-900-11	SN74LS11N
IC203, 213, 222, 254, 279, 281, 290, 2209		
	8-759-900-32	SN74LS32N
IC265	8-759-900-54	SN74LS54N
IC205, 206, 214, 229, 231, 235, 243, 257, 267, 283, 2204, 2205		
	8-759-900-74	SN74LS74AN
IC248	8-759-900-86	SN74L886N

Ref. No.	Part No.	Description
IC2211	8-759-901-23	SN74LS123N
IC274, 275, 276	8-759-901-53	SN74LS153N
IC217, 219, 272, 273	8-759-901-57	SN74LS157N
IC238, 259, 260, 262, 263, 297	8-759-901-63	SN74LS163A
IC227	8-759-901-74	SN74LS174N
IC240	8-759-901-75	SN74LS175N
IC221	8-759-901-94	74LS194AN
IC299, 2201	8-759-901-95	74LS195AN
IC253	8-759-902-93	SN74LS293N
IC285	8-759-903-75	SN74LS375N
IC208, 216, 228, 241, 255, 266, 268, 270, 278	8-759-903-93	SN74LS393N
IC202	8-759-904-40	MSM4040
IC223, 224, 226	8-759-906-69	SN74LS669N
IC210, 294, 298	8-759-910-00	SN74S00N
IC246	8-759-910-02	SN74S02N
IC2208, 2214	8-759-910-04	SN74S04N
IC284	8-759-910-10	SN74S10N
IC244, 245, 295	8-759-910-74	SN74S74N
IC233, 234, 296	8-759-911-63	SN74S163N
IC218	8-759-912-01	SN74S201N
IC258	8-759-927-13	AM27S13DC
IC286, 287, 288, 289	8-759-940-44	TMS4044-20
IC2203	8-759-994-01	9401PC

Ref. No.	Part No.	Description
	A-4335-120-A	PB CONTROL UNIT (PB-1) (PCM-100)
C234	1-102-106-00	CERAMIC 100P 10% 50V
C235	1-102-123-00	CERAMIC 0.0033 10% 50V
C233, 237	1-131-209-61	TANTAL 0.1 10% 35V
C239	1-131-380-21	TANTAL 33 10% 10V
C201–232, 236, 240–246	1-131-449-00	TANTAL 3.3 20% 16V
R210	1-214-109-00	METAL 110 1% 1/4W
R207	1-214-116-00	METAL 220 1% 1/4W
R202–206	1-214-120-00	METAL 330 1% 1/4W
R201, 208, 209	1-214-132-00	METAL 1K 1% 1/4W
R211, 212	1-214-172-00	METAL 47K 1% 1/4W
D201, 202	8-719-301-03	SEL103R
Q201–207	8-729-387-27	2SA872-D
IC261	8-759-752-48	S471NSYNC
IC206, 211, 215, 225, 249, 264, 269, 293, 2202, 2206	8-759-900-00	SN74LS00N
IC239	8-759-900-02	SN74LS02N
IC209, 250, 280, 292, 2210	8-759-900-04	SN74LS04N
IC201, 207, 212, 220, 237, 242, 247, 251, 252, 256, 282, 291, 2207, 2215	8-759-900-08	SN74LS08N
IC204, 230, 236, 271, 277	8-759-900-11	SN74LS11N
IC203, 213, 222, 254, 279, 281, 290, 2209, 2216	8-759-900-32	SN74LS32N
IC265	8-759-900-54	SN74LS54N
IC205, 214, 229, 231, 235, 243, 257, 267, 283, 2204, 2205, 2212, 2213, 2211	8-759-900-74	SN74LS74AN
IC248	8-759-900-86	SN74LS86N
IC232	8-759-901-23	SN74LS123N

Ref. No.	Part No.	Description
A-4335-120-A		PB CONTROL UNIT (PB-1) (PCM-100)
C234	1-102-106-00	CERAMIC 100P 10% 50V
C235	1-102-123-00	CERAMIC 0.0033 10% 50V
C233, 237	1-131-209-61	TANTAL 0.1 10% 35V
C239	1-131-380-21	TANTAL 33 10% 10V
C201–232, 236, 240–246	1-131-449-00	TANTAL 3.3 20% 16V
R210	1-214-109-00	METAL 110 1% 1/4W
R207	1-214-116-00	METAL 220 1% 1/4W
R202–206	1-214-120-00	METAL 330 1% 1/4W
R201, 208, 209	1-214-132-00	METAL 1K 1% 1/4W
R211, 212	1-214-172-00	METAL 47K 1% 1/4W
D201, 202	8-719-301-03	SEL1038
Q201–207	8-729-387-27	2SA872-D
IC261	8-759-752-48	SA71NSYNC
IC206, 211, 215, 225, 249, 264, 269, 293, 2202, 2206	8-759-900-00	SN74LS00N
IC239	8-759-900-02	SN74LS02N
IC209, 250, 280, 292, 2210	8-759-900-04	SN74LS04N
IC201, 207, 212, 220, 237, 242, 247, 251, 252, 256, 282, 291, 2207, 2215	8-759-900-08	SN74LS08N
IC204, 230, 236, 271, 277	8-759-900-11	SN74LS11N
IC203, 213, 222, 254, 279, 281, 290, 2209, 2216	8-759-900-32	SN74LS32N
IC265	8-759-900-54	SN74LS54N
IC205, 214, 229, 231, 235, 243, 257, 267, 283, 2204, 2205, 2212, 2213, 2217	8-759-900-74	SN74LS74AN
IC248	8-759-900-86	SN74LS86N
IC232	8-759-901-23	SN74LS123N
IC221	8-759-901-23	SN74LS123N
IC274, 275, 276	8-759-901-53	SN74LS153N
IC217, 219, 272, 273	8-759-901-57	SN74LS157N
IC238, 259, 260, 262, 263, 297	8-759-901-63	SN74LS163A
IC227	8-759-901-74	SN74LS174N
IC240	8-759-901-75	SN74LS175N
IC221	8-759-901-94	74LS194AN
IC299, 2201	8-759-901-95	74LS195AN
IC253	8-759-902-93	SN74LS293N
IC285	8-759-903-75	SN74LS375N
IC208, 216, 228, 241, 255, 266, 268, 270, 278	8-759-903-93	SN74LS393N
IC202	8-759-904-40	MSM4040
IC223, 224, 226	8-759-906-69	SN74LS669N
IC210, 294, 298	8-759-910-00	SN74S00N
IC246	8-759-910-02	SN74S02N
IC220, 2214	8-759-910-04	SN74S04N
IC284	8-759-910-10	SN74S10N
IC244, 245, 295	8-759-910-74	SN74S74N
IC233, 234, 296	8-759-911-63	SN74S163N
IC218	8-759-912-01	SN74S201N
IC258	8-759-927-13	AM27S13DC
IC286, 287, 288, 289	8-759-940-44	TMS4044-20
IC2203	8-759-994-01	940TPC

Ref. No.	Part No.	Description
IC274, 275, 276		
	8-759-901-53	SN74LS153N
IC217, 219, 272, 273		
	8-759-901-57	SN74LS157N
IC234, 238, 259, 260, 262, 263, 297		
	8-759-901-63	SN74LS163A
IC227	8-759-901-74	SN74LS174N
IC240	8-759-901-75	SN74LS175N
IC221	8-759-901-94	SN74LS194AN
IC299, 2201		
	8-759-901-95	SN74LS195AN
IC253	8-759-902-93	SN74LS293N
IC285	8-759-903-75	SN74LS375N
IC208, 216, 228, 241, 255, 266, 268, 270, 278		
	8-759-903-93	SN74LS393N
IC202	8-759-904-40	MSM4040
IC223, 224, 226		
	8-759-906-69	SN74LS669N
IC210, 294, 298		
	8-759-910-00	SN74S00N
IC246, 2214		
	8-759-910-02	SN74S02N
IC2208	8-759-910-04	SN74S04N
IC284	8-759-910-10	SN74S10N
IC244, 245, 295		
	8-759-910-74	SN74S74N
IC233, 296		
	8-759-911-63	SN74S163N
IC218	8-759-912-01	SN74S201N
IC258	8-759-927-13	AM27S13DC
IC286–289		
	8-759-940-44	TMS4044-20
IC2203	8-759-994-01	9401PC

AD/DA CONVERT UNIT

Ref. No.	Part No.	Description
	A-4334-002-A	AD-DA CONVERT UNIT (PCM-10)
C411, 415	1-101-004-00	CERAMIC 0.01 Z% 50V
C420, 423	1-107-084-00	SILVERD MICA 91P 5% 50V
C406, 408, 421, 424		
	1-107-102-00	MICA 5P ± 0.5P 50V
C419, 422	1-107-270-00	SILVERED MICA 0.001 5% 100V
C405–407	1-107-274-00	SILVERED MICA 0.0015 5% 100V
C401, 403	1-121-941-00	ELECT SINGLE 470 H% 35V
C402, 404	1-121-944-00	ELECT SINGLE 1000 H% 16V
C412, 417, 427, 431–442, 478		
	1-131-449-00	TANTAL 3.3 20% 16V
C413, 414, 418, 425, 426, 428, 429, 443–456, 458–467, 470–477		
	1-131-450-00	TANTAL 1.0 20% 35V
R423	1-214-108-00	METAL 100 1% 1/4W
R401, 402, 403, 424, 425, 426, 443, 444, 448, 449		
	1-214-132-00	METAL 1K 1% 1/4W
R438, 439	1-214-134-00	METAL 1.2K 1% 1/4W
R422	1-214-144-00	METAL 3.3K 1% 1/4W
R421, 441, 442		
	1-214-156-00	METAL 10K 1% 1/4W
R437, 440	1-214-160-00	METAL 15K 1% 1/4W
R420	1-214-180-00	METAL 100K 1% 1/4W
R429, 434	1-214-864-11	METAL 1.0K 1% 1/2W
R431, 436	1-214-866-11	METAL 1.2K 1% 1/2W
R404, 410	1-214-873-11	METAL 2.4K 1% 1/2W
R408, 409, 414, 415, 427, 428, 432, 433		
	1-214-876-11	METAL 3.3K 1% 1/2W
R430, 435	1-214-884-11	METAL 6.8K 1% 1/2W
R406, 412, 418		
	1-214-888-11	METAL 10K 1% 1/2W
R405, 411	1-214-900-11	METAL 30K 1% 1/2W
R419	1-214-913-11	METAL 100K 1% 1/2W
R416, 417	1-214-921-11	METAL 220K 1% 1/2W
R407, 413	1-214-937-11	METAL 1.0M 1% 1/2W
VR407	1-226-750-11	METAL GLAZE 100

Ref. No.	Part No.	Description
IC274, 275, 276		
	8-759-901-53	SN74LS153N
IC217, 219, 272, 273		
	8-759-901-57	SN74LS157N
IC234, 238, 259, 260, 262, 263, 267		
	8-759-901-63	SN74LS163A
IC227	8-759-901-74	SN74LS174N
IC240	8-759-901-75	SN74LS175N
IC221	8-759-901-94	SN74LS194AN
IC299, 2201		
	8-759-901-95	SN74LS195AN
IC253	8-759-902-93	SN74LS293N
IC285	8-759-903-75	SN74LS375N
IC208, 216, 228, 241, 255, 266, 268, 270, 278		
	8-759-903-93	SN74LS393N
IC202	8-759-904-40	MSM4040
IC223, 224, 226		
	8-759-908-69	SN74LS669N
IC210, 294, 298		
	8-759-910-00	SN74S00N
IC246, 2214		
	8-759-910-02	SN74S02N
IC2208	8-759-910-04	SN74S04N
IC284	8-759-910-10	SN74S10N
IC244, 245, 295		
	8-759-910-74	SN74S74N
IC233, 296		
	8-759-911-63	SN74S163N
IC218	8-759-912-01	SN74S201N
IC258	8-759-927-13	AM27S13DC
IC286—289		
	8-759-940-44	TMS4044-20
IC2203	8-759-994-01	940IPC

AD\DA CONVERT UNIT

A-4334-002-A AD-DA CONVERT UNIT (PCM-10)

Ref. No.	Part No.	Description
C411, 415	1-107-004-00	CERAMIC 0.01 2% 50V
C420, 423	1-107-084-00	SILVERD MICA 91P 5% 50V
C406, 408, 421, 424		
	1-107-102-00	MICA 5P ± 0.5P 50V
C419, 422	1-107-270-00	SILVERED MICA 0.001 5% 100V
C405—407	1-107-274-00	SILVERED MICA 0.0015 5% 100V
C401, 403	1-121-941-00	ELECT SINGLE 470 H% 35V
C402, 404	1-121-944-00	ELECT SINGLE 1000 H% 16V
C412, 417, 427, 431—442, 478		
	1-131-449-00	TANTAL 3.3 20% 16V
C413, 414, 418, 425, 426, 428, 429, 443—456, 458—467, 470—477		
	1-131-450-00	TANTAL 1.0 20% 35V
R423	1-214-108-00	METAL 100 1% 1/4W
R401, 402, 403, 424, 425, 426, 443, 444, 448, 449		
	1-214-132-00	METAL 1K 1% 1/4W
R438, 439	1-214-134-00	METAL 1.2K 1% 1/4W
R422	1-214-144-00	METAL 3.3K 1% 1/4W
R421, 441, 442		
	1-214-156-00	METAL 10K 1% 1/4W
R437, 440	1-214-160-00	METAL 15K 1% 1/4W
R420	1-214-180-00	METAL 100K 1% 1/4W
R429, 434	1-214-864-11	METAL 1.0K 1% 1/2W
R431, 436	1-214-868-11	METAL 1.2K 1% 1/2W
R404, 410	1-214-873-11	METAL 2.4K 1% 1/2W
R408, 409, 414, 415, 427, 428, 432, 433		
	1-214-876-11	METAL 3.3K 1% 1/2W
R430, 435	1-214-884-11	METAL 6.8K 1% 1/2W
R406, 412, 418		
	1-214-888-11	METAL 10K 1% 1/2W
R405, 411	1-214-900-11	METAL 30K 1% 1/2W
R419	1-214-913-11	METAL 100K 1% 1/2W
R416, 417	1-214-921-11	METAL 220K 1% 1/2W
R407, 413	1-214-937-11	METAL 1.0M 1% 1/2W
VR407	1-229-750-11	METAL GLAZE 100

Ref. No.	Part No.	Description
VR401–406		
	1-226-751-11	METAL GLAZE 20K
Q403, 404	8-719-100-52	THYRISTOR 5P2M
D403	8-719-815-55	1S1555
D404, 405	8-719-912-00	MV-12N
D401, 402	8-719-931-17	EQB01-17
Q405, 406	8-729-163-47	2SC1634-P
Q401	8-759-378-15	FS7815M
Q402	8-759-379-15	FS7915M
IC424	8-759-900-00	SN74LS00N
IC436, 438		
	8-759-900-04	SN74LS04N
IC437	8-759-900-08	SN74LS08N
IC422, 439		
	8-759-900-32	SN74LS32N
IC423, 425, 431, 435		
	8-759-900-74	SN74LS74AN
IC418, 432–434, 442–445		
	8-759-901-57	SN74LS157N
IC419, 421, 426		
	8-759-901-64	SN74LS164N
IC440, 441		
	8-759-901-66	SN74LS166N
IC427, 428		
	8-759-901-74	SN74LS174N
IC420	8-759-901-75	SN74LS175N
IC403, 406		
	8-759-903-10	LM310H
IC407, 410		
	8-759-903-54	LF357AH
IC401, 402, 404, 405, 409, 412, 413		
	8-759-903-56	LF356H
IC417	8-759-905-06	TL506CN
IC430	8-759-905-78	AD578
IC408, 411		
	8-759-905-82	AD582KH
IC429	8-759-971-00	DAC71C0B-V
IC414, 415, 416		
	8-759-975-12	AD7512DIKN

Ref. No.	Part No.	Description
	A-4335-146-A	AD-DA CONVERT UNIT (PCM-100)
C411, 415	1-101-004-00	CERAMIC 0.01 Z% 50V
C420, 423	1-107-095-00	MICA 270P 5% 50V
C451	1-107-099-00	MICA 2P ± 0.5P 50V
C406, 408, 421, 424		
	1-107-102-00	MICA 5P ± 0.5P 50V
C419, 422	1-107-270-00	SILVERED MICA 0.001 5% 100V
C405, 407	1-107-274-00	SILVERED MICA 0.0015 5% 100V
C401, 403	1-121-941-00	ELECT SINGLE 470 H% 35V
C402, 404	1-121-944-00	ELECT SINGLE 1000 H% 16V
C478–481		
	1-131-201-00	ELECT TANTAL 22 20% 16V
C430–443	1-131-449-00	TANTAL 3.3 20% 16V
C412–414, 418, 429, 444–450, 452–470, 473–477		
	1-131-450-00	TANTAL 1.0 20% 35V
R423	1-214-108-00	METAL 100 1% 1/4W
R401, 402, 403, 424, 425, 426, 448, 449		
	1-214-132-00	METAL 1K 1% 1/4W
R422	1-214-144-00	METAL 3.3K 1% 1/4W
R421	1-214-156-00	METAL 10K 1% 1/4W
R420	1-214-180-00	METAL 100K 1% 1/4W
R429, 434	1-214-864-11	METAL 1.0K 1% 1/2W
R431, 436	1-214-866-11	METAL 1.2K 1% 1/2W
R404, 410	1-214-873-11	METAL 2.4K 1% 1/2W
R408, 409, 414, 415, 427, 428, 432, 433		
	1-214-876-11	METAL 3.3K 1% 1/2W
R430, 435	1-214-884-11	METAL 6.8K 1% 1/2W
R406, 412, 418, 452, 453		
	1-214-888-11	METAL 10K 1% 1/2W
R405, 411	1-214-900-11	METAL 30K 1% 1/2W
R419, 450, 451		
	1-214-913-11	METAL 100K 1% 1/2W
R416, 417	1-214-921-11	METAL 220K 1% 1/2W
R407, 413	1-214-937-11	METAL 1.0M 1% 1/2W

Ref. No.	Part No.	Description
VR401—406		
	1-226-751-11	METAL GLAZE 20K
Q403, 404	8-719-100-82	THYRISTOR 5P2M
D403	8-719-815-85	1S1555
D404, 405	8-719-812-00	MV-12N
D401, 402	8-719-831-17	EQB01-17
Q405, 406	8-729-163-47	2SC1634-P
Q401	8-729-378-15	FS7815M
Q402	8-729-379-15	FS7915M
IC424	8-759-800-00	SN74LS00N
IC426, 438		
	8-759-800-04	SN74LS04N
IC427	8-759-800-08	SN74LS08N
IC422, 439		
	8-759-800-32	SN74LS32N
IC423, 425, 431, 435		
	8-759-800-74	SN74LS74AN
IC418, 432—434, 442—445		
	8-759-801-57	SN74LS157N
IC419, 421, 426		
	8-759-801-64	SN74LS164N
IC440, 441		
	8-759-801-66	SN74LS166N
IC427, 428		
	8-759-801-74	SN74LS174N
IC420	8-759-801-75	SN74LS175N
IC403, 408		
	8-759-803-10	LM310H
IC407, 410		
	8-759-803-54	LF357AH
IC401, 402, 404, 405, 409, 412, 413		
	8-759-803-56	LF356H
IC417	8-759-805-06	TL506CN
IC430	8-759-805-78	AD578
IC408, 411		
	8-759-805-82	AD582KH
IC429	8-759-971-00	DAC71C08-V
IC414, 415, 416		
	8-759-975-12	AD7512DIKN

Ref. No.	Part No.	Description
	A-4235-146-A	AD-DA CONVERT UNIT (PCM-100)
C411, 415	1-101-004-00	CERAMIC 0.01 2% 50V
C420, 423	1-107-095-00	MICA 270P 5% 50V
C451	1-107-099-00	MICA 2P ± 0.5P 50V
C406, 408, 421, 424		
	1-107-102-00	MICA 5P ± 0.5P 50V
C419, 422	1-107-270-00	SILVERED MICA 0.001 5% 100V
C405, 407	1-107-274-00	SILVERED MICA 0.0015 5% 100V
C401, 403	1-121-941-00	ELECT SINGLE 470 H% 35V
C402, 404	1-121-944-00	ELECT SINGLE 1000 H% 16V
C478—481		
	1-131-201-00	ELECT TANTAL 22 20% 16V
C430—443	1-131-449-00	TANTAL 3.3 20% 16V
C412—414, 418, 429, 444—450, 452—470, 473—477		
	1-131-450-00	TANTAL 1.0 20% 35V
R423	1-214-108-00	METAL 100 1% 1/4W
R401, 402, 403, 424, 425, 428, 448, 449		
	1-214-132-00	METAL 1K 1% 1/4W
R422	1-214-144-00	METAL 3.3K 1% 1/4W
R421	1-214-156-00	METAL 10K 1% 1/4W
R420	1-214-180-00	METAL 100K 1% 1/4W
R429, 434	1-214-864-11	METAL 1.0K 1% 1/2W
R431, 436	1-214-866-11	METAL 1.2K 1% 1/2W
R404, 410	1-214-872-11	METAL 2.4K 1% 1/2W
R408, 409, 414, 415, 427, 428, 432, 433		
	1-214-876-11	METAL 3.3K 1% 1/2W
R430, 435	1-214-884-11	METAL 6.8K 1% 1/2W
R406, 412, 418, 452, 453		
	1-214-888-11	METAL 10K 1% 1/2W
R405, 411	1-214-900-11	METAL 30K 1% 1/2W
R419, 450, 451		
	1-214-913-11	METAL 100K 1% 1/2W
R416, 417	1-214-921-11	METAL 220K 1% 1/2W
R407, 413	1-214-927-11	METAL 1.0M 1% 1/2W

Ref. No.	Part No.	Description
VR401–406		
	1-226-751-11	METAL GLAZE 20K
Q403, 404	8-719-100-52	THYRISTOR 5P2M
D403	8-719-815-55	1S1555
D401, 402	8-719-931-17	EQB01-17
Q405, 406	8-729-163-47	2SC1634-P
Q401	8-759-378-15	FS7815M
Q402	8-759-379-15	FS7915M
IC428, 431		
	8-759-900-04	SN74LS04N
IC429	8-759-900-08	SN74LS08N
IC432	8-759-900-32	SN74LS32N
IC421, 427		
	8-759-900-74	SN74LS74AN
IC418, 435–438		
	8-759-901-57	SN74LS157N
IC419, 422, 430		
	8-759-901-64	SN74LS164N
IC433, 434		
	8-759-901-66	SN74LS166N
IC423, 424		
	8-759-901-74	SN74LS174N
IC420	8-759-901-75	SN74LS175N
IC403, 406		
	8-759-903-10	LM310H
IC407, 410		
	8-759-903-54	LF357AH
IC401, 402, 404, 405, 409, 412, 413		
	8-759-903-56	LF356H
IC408, 411		
	8-759-905-82	AD582KH
IC426	8-759-927-14	MP2714C
IC425	8-759-971-00	DAC71C0B-V
IC414, 415, 416		
	8-759-975-12	AD7512DIKN

Ref. No.	Part No.	Description
AUDIO CONTROL UNIT		
	A-4334-003-A	AUDIO CONTROL UNIT (PCM-10)
C506, 556, 635		
	1-101-004-00	CERAMIC 0.01 Z% 50V
C636, 655	1-107-085-00	SILVERED MICA 100P 5% 50V
C607	1-107-102-00	MICA 5P ± 0.5P 50V
C505, 555	1-107-275-00	SILVERED MICA 0.015 5% 100V
C639	1-108-571-00	MYLAR 0.0047 5% 50V
C621	1-108-579-00	MYLAR 0.01 5% 50V
C622	1-108-585-00	MYLAR 0.018 5% 50V
C614	1-108-611-00	MYLAR 0.22 5% 50V
C601, 603, 649, 651		
	1-121-941-00	ELECT SINGLE 470 H% 35V
C602, 604, 650, 652		
	1-121-944-00	ELECT SINGLE 1000 H% 16V
C653	1-123-465-00	ELECT 220 20% 6.3V
C617, 634	1-131-209-61	TANTAL 0.1 10% 35V
C630	1-131-211-61	TANTAL 0.22 10% ·35V
C608, 609, 612, 613, 618, 620, 623, 625, 633, 640, 641, 646, 647, 648, 654		
	1-131-449-00	TANTAL 3.3 20% 16V
C501–504, 507–513, 551–554, 557–563, 605, 606, 619, 624, 626–629, 631, 632, 637, 638, 642–645		
	1-131-450-00	TANTAL 1.0 20% 35V
R685	1-212-516-11	METAL 200 1% 1/2W
R515, 565	1-212-709-11	METAL 200K 1% 1/2W
R618	1-212-718-11	METAL 470K 1% 1/2W
R607–612, 681		
	1-214-084-00	METAL 10 1% 1/4W
R604	1-214-100-00	METAL 47 1% 1/4W
R686	1-214-104-00	METAL 68 1% 1/4W
R601	1-214-105-00	METAL 75 1% 1/4W
R529, 530, 579, 580, 613, 614		
	1-214-108-00	METAL 100 1% 1/4W

Ref. No.	Part No.	Description
VR401—406		
	1-226-751-11	METAL GLAZE 20K
D403, 404	8-719-100-52	THYRISTOR 5P2M
D403	8-719-815-55	1S1555
D401, 402	8-719-931-17	EG801-17
D405, 406	8-729-163-47	2SC1634-P
D401	8-759-378-15	PS7815M
D402	8-759-379-15	PS7915M
IC428, 431		
	8-759-900-04	SN74LS04N
IC429	8-759-900-08	SN74LS08N
IC432	8-759-900-32	SN74LS32N
IC421, 427		
	8-759-900-74	SN74LS74AN
IC418, 435—438		
	8-759-901-57	SN74LS157N
IC419, 422, 430		
	8-759-901-64	SN74LS164N
IC433, 434		
	8-759-901-66	SN74LS166N
IC423, 424		
	8-759-901-74	SN74LS174N
IC420	8-759-901-75	SN74LS175N
IC403, 406		
	8-759-903-10	LM310H
IC407, 410		
	8-759-903-54	LF357AH
IC401, 402, 404, 405, 409, 412, 413		
	8-759-903-56	LF356H
IC408, 411		
	8-759-905-82	ADS82KH
IC426	8-759-927-14	MP7714C
IC425	8-759-971-00	DAC7110B-V
IC414, 415, 416		
	8-759-975-12	AD7512DIKN

Ref. No.	Part No.	Description
AUDIO CONTROL UNIT		
A-4334-003-A		AUDIO CONTROL UNIT (PCM-10)
C506, 556, 635		
	1-101-004-00	CERAMIC 0.01 2% 50V
C536, 655	1-107-085-00	SILVERED MICA 100P 5% 50V
C507	1-107-102-00	MICA 5P ± 0.5P 50V
C505, 555	1-107-275-00	SILVERED MICA 0.015 5% 100V
C539	1-108-571-00	MYLAR 0.0047 5% 50V
C521	1-108-579-00	MYLAR 0.01 5% 50V
C522	1-108-585-00	MYLAR 0.018 5% 50V
C514	1-108-611-00	MYLAR 0.22 5% 50V
C601, 603, 649, 651		
	1-121-941-00	ELECT SINGLE 470 M% 35V
C602, 604, 650, 652		
	1-121-944-00	ELECT SINGLE 1000 M% 16V
C653	1-123-465-00	ELECT 220 20% 6.3V
C617, 634	1-131-209-61	TANTAL 0.1 10% 35V
C630	1-131-211-61	TANTAL 0.22 10% 35V
C608, 609, 612, 613, 618, 620, 623, 625, 633, 640, 641, 646, 647, 648, 654		
	1-131-449-00	TANTAL 3.3 20% 16V
C501—504, 507—513, 551—554, 557—563, 605, 606, 619, 624, 626—629, 631, 632, 637, 638, 642—645		
	1-131-450-00	TANTAL 1.0 20% 35V
R585	1-212-516-11	METAL 200 1% 1/2W
R515, 555	1-212-709-11	METAL 200K 1% 1/2W
R618	1-212-718-11	METAL 470K 1% 1/2W
R607—612, 681		
	1-214-084-00	METAL 10 1% 1/4W
R604	1-214-100-00	METAL 47 1% 1/4W
R686	1-214-104-00	METAL 68 1% 1/4W
R601	1-214-108-00	METAL 75 1% 1/4W
R529, 530, 579, 580, 613, 614		
	1-214-108-00	METAL 100 1% 1/4W

Ref. No.	Part No.	Description
R527, 528, 577, 578, 638	1-214-120-00	METAL 330 1% 1/4W
R622, 627, 632, 647, 672, 673, 675, 676	1-214-124-00	METAL 470 1% 1/4W
R519, 569	1-214-126-00	METAL 560 1% 1/4W
R660	1-214-128-00	METAL 680 1% 1/4W
R517, 532, 567, 582, 617, 623, 626, 633, 634, 639, 649, 650, 651, 653, 662, 663, 664, 674, 677, 678, 690	1-214-132-00	METAL 1K 1% 1/4W
R615	1-214-136-00	METAL 1.5K 1% 1/4W
R625	1-214-137-00	METAL 1.6K 1% 1/4W
R602, 636, 644, 668, 669	1-214-140-00	METAL 2.2K 1% 1/4W
R628	1-214-141-00	METAL 2.4K 1% 1/4W
R616, 657, 658	1-214-144-00	METAL 3.3K 1% 1/4W
R605, 606, 620, 621, 635, 637, 640, 641, 643, 646, 656, 667, 684, 687	1-214-148-00	METAL 4.7K 1% 1/4W
R506, 507, 509, 510, 524, 525, 533, 534, 556, 557, 559, 560, 574, 575, 583, 584	1-214-149-00	METAL 5.1K 1% 1/4W
R520, 570	1-214-150-00	METAL 5.6K 1% 1/4W
R671	1-214-152-00	METAL 6.8K 1% 1/4W
R603, 631	1-214-154-00	METAL 8.2K 1% 1/4W
R629	1-214-155-00	METAL 9.1K 1% 1/4W
R518, 568, 619, 624, 645, 654, 666, 670, 680, 688, 689	1-214-156-00	METAL 10K 1% 1/4W
R630, 679	1-214-158-00	METAL 12K 1% 1/4W
R642	1-214-159-00	METAL 13K 1% 1/4W
R659	1-214-160-00	METAL 15K 1% 1/4W
R665	1-214-164-00	METAL 22K 1% 1/4W
R516, 566, 655, 683	1-214-172-00	METAL 47K 1% 1/4W

Ref. No.	Part No.	Description
R521, 531, 571, 581, 682	1-214-180-00	METAL 100K 1% 1/4W
R511, 561	1-214-849-11	METAL 240 1% 1/2W
R523, 573	1-214-850-11	METAL 270 1% 1/2W
R503, 508, 513, 522, 553, 558, 563, 572	1-214-864-11	METAL 1.0K 1% 1/2W
R504, 554	1-214-868-11	METAL 1.5K 1% 1/2W
R512, 562	1-214-875-11	METAL 3.0K 1% 1/2W
R526, 576	1-214-876-11	METAL 3.3K 1% 1/2W
R505, 555	1-214-883-11	METAL 6.2K 1% 1/2W
R501, 502, 551, 552	1-214-901-11	METAL 33K 1% 1/2W
R514, 564	1-214-927-11	METAL 390K 1% 1/2W
VR502–505, 507, 508, 552–555, 557, 558	1-226-143-11	METAL GLAZE 10K
VR506, 556	1-226-477-11	METAL FILM 1K
L601	1-407-282-00	VRIABLE INDUCTOR 0.47mH
D501, 502, 551, 552, 601, 605, 606–609, 614, 615	8-719-815-55	1S1555
D602–604, 610–613	8-719-912-00	MV-12N
Q501, 502, 551, 552	8-727-302-00	2SK42-2
Q602, 604, 607, 612, 614, 618, 619	8-729-103-37	2SA733P
Q601, 603, 608, 609, 615–617, 620–627	8-729-163-47	2SC1634-P
Q504, 554	8-729-307-65	2SJ76
Q503, 553	8-729-321-35	2SK213
Q605, 606, 610, 613	8-729-671-14	2SC710-14
IC603	8-759-115-90	μPC159A
IC601, 610	8-759-378-15	FS7815M

Ref. No.	Part No.	Description
R527, 528, 577, 578, 638	1-214-120-00	METAL 330 1% 1/4W
R622, 627, 632, 647, 672, 673, 675, 676	1-214-124-00	METAL 470 1% 1/4W
R519, 569	1-214-126-00	METAL 560 1% 1/4W
R560	1-214-128-00	METAL 680 1% 1/4W
R517, 532, 567, 582, 617, 623, 628, 633, 634, 639, 649, 660, 661, 663, 662, 663, 664, 674, 677, 678, 690	1-214-132-00	METAL 1K 1% 1/4W
R615	1-214-136-00	METAL 1.5K 1% 1/4W
R625	1-214-137-00	METAL 1.6K 1% 1/4W
R602, 636, 644, 668, 669	1-214-140-00	METAL 2.2K 1% 1/4W
R628	1-214-141-00	METAL 2.4K 1% 1/4W
R516, 657, 658	1-214-144-00	METAL 3.3K 1% 1/4W
R505, 606, 620, 621, 635, 637, 640, 641, 643, 646, 656, 667, 684, 687	1-214-148-00	METAL 4.7K 1% 1/4W
R506, 507, 509, 510, 524, 525, 533, 534, 556, 557, 559, 560, 574, 575, 583, 584	1-214-149-00	METAL 5.1K 1% 1/4W
R520, 570	1-214-150-00	METAL 5.6K 1% 1/4W
R571	1-214-152-00	METAL 6.8K 1% 1/4W
R603, 631	1-214-154-00	METAL 8.2K 1% 1/4W
R629	1-214-156-00	METAL 9.1K 1% 1/4W
R518, 568, 619, 624, 645, 664, 666, 670, 680, 688, 689	1-214-158-00	METAL 10K 1% 1/4W
R630, 679	1-214-158-00	METAL 12K 1% 1/4W
R642	1-214-159-00	METAL 13K 1% 1/4W
R659	1-214-160-00	METAL 15K 1% 1/4W
R665	1-214-164-00	METAL 22K 1% 1/4W
R516, 566, 655, 683	1-214-172-00	METAL 47K 1% 1/4W
R527, 531, 571, 581, 682	1-214-180-00	METAL 100K 1% 1/4W
R511, 561	1-214-849-11	METAL 240 1% 1/2W
R523, 573	1-214-850-11	METAL 270 1% 1/2W
R503, 508, 513, 522, 553, 558, 563, 572	1-214-864-11	METAL 1.0K 1% 1/2W
R504, 554	1-214-868-11	METAL 1.5K 1% 1/2W
R512, 562	1-214-875-11	METAL 3.0K 1% 1/2W
R526, 576	1-214-876-11	METAL 3.3K 1% 1/2W
R505, 555	1-214-883-11	METAL 6.2K 1% 1/2W
R501, 502, 551, 552	1-214-901-11	METAL 33K 1% 1/2W
R514, 564	1-214-927-11	METAL 390K 1% 1/2W
VR502–505, 507, 508, 552–555, 557, 558	1-226-143-11	METAL GLAZE 10K
VR506, 556	1-226-427-11	METAL FILM 1K
L601	1-407-282-00	VARIABLE INDUCTOR 0.47mH
D501, 502, 551, 552, 601, 605, 608–609, 614, 615	8-719-815-55	1S1555
D602–604, 610–613	8-719-812-00	MV-12N
Q501, 502, 551, 552	8-727-302-00	2SK42-2
Q602, 604, 607, 612, 614, 618, 619	8-729-103-37	2SA733P
Q601, 603, 608, 609, 615–617, 620–627	8-729-163-47	2SC1634-P
Q504, 554	8-729-307-65	2S176
Q503, 553	8-729-321-35	2SK213
Q605, 606, 610, 613	8-729-671-14	2SC710-14
IC603	8-759-115-90	μPC159A
IC601, 610	8-759-378-15	FS7815M

Ref. No.	Part No.	Description
IC602, 611		
	8-759-379-15	FS7915M
IC606	8-759-900-04	SN74LS04N
IC501, 504, 551, 554		
	8-759-903-54	LF357AH
IC502, 505, 552, 555		
	8-759-903-56	LF356H
IC607, 608, 609		
	8-759-905-06	TL506CN
IC503, 553		
	8-759-926-88	S2688
Q611	8-765-212-30	2SA925-23
	A-4335-147-A	AUDIO CONTROL UNIT (PCM-100)
C510, 560, 635		
	1-101-004-00	CERAMIC 0.01 Z% 50V
C636, 655	1-107-085-00	MICA 100P 5% 50V
C607	1-107-102-00	MICA 5P ± 0.5P 50V
C507, 557	1-107-275-00	MICA 0.015 5% 100V
C639	1-108-571-00	MYLAR 0.0047 5% 50V
C621	1-108-579-00	MYLAR 0.01 5% 50V
C622	1-108-585-00	MYLAR 0.018 5% 50V
C614	1-108-611-00	MYLAR 0.22 5% 50V
C601, 603, 649, 651		
	1-121-941-00	ELECT SINGLE 470 H% 35V
C602, 604, 650, 652		
	1-121-944-00	ELECT SINGLE 1000 H% 16V
C653	1-123-465-00	ELECT 220 20% 6.3V
C617, 634	1-131-209-61	TANTAL 0.1 10% 35V
C630	1-131-211-61	TANTAL 0.22 10% 35V
C608, 609, 612, 613, 618, 620, 623, 625, 633, 640, 641, 646, 647, 648, 654		
	1-131-449-00	TANTAL 3.3 20% 16V
C501–506, 508, 509, 511–521, 551–556, 558, 559, 561–571, 605, 606, 615, 616, 619, 624, 626–629, 631, 632, 637, 638, 642–645		
	1-131-450-00	TANTAL 1.0 20% 35V

Ref. No.	Part No.	Description
R685, 686	1-212-516-11	METAL 200 1% 1/2W
R546, 596	1-212-709-11	METAL 200K 1% 1/2W
R618	1-212-718-11	METAL 470K 1% 1/2W
R607–612, 681		
	1-214-084-00	METAL 10 1% 1/4W
R604	1-214-100-00	METAL 47 1% 1/4W
R691	1-214-104-00	METAL 68 1% 1/4W
R601	1-214-105-00	METAL 75 1% 1/4W
R537, 538, 544, 545, 587, 588, 594, 595, 613, 614		
	1-214-108-00	METAL 100 1% 1/4W
R535, 536, 542, 543, 585, 586, 592, 593, 638		
	1-214-120-00	METAL 330 1% 1/4W
R622, 627, 632, 647, 672, 673, 675, 676		
	1-214-124-00	METAL 470 1% 1/4W
R522, 572	1-214-126-00	METAL 560 1% 1/4W
R660	1-214-128-00	METAL 680 1% 1/4W
R520, 525, 570, 575, 617, 623, 626, 633, 634, 639, 649, 650, 651, 653, 662, 663, 665, 674, 677, 678, 687		
	1-214-132-00	METAL 1K 1% 1/4W
R615	1-214-136-00	METAL 1.5K 1% 1/4W
R625	1-214-137-00	METAL 1.6K 1% 1/4W
R602, 636, 644, 668, 669		
	1-214-140-00	METAL 2.2K 1% 1/4W
R628	1-214-141-00	METAL 2.4K 1% 1/4W
R616, 657, 658		
	1-214-144-00	METAL 3.3K 1% 1/4W
R605, 606, 620, 621, 635, 637, 640, 641, 643, 646, 656, 667, 684, 690		
	1-214-148-00	METAL 4.7K 1% 1/4W
R510, 511, 513, 514, 526, 527, 532, 533, 539, 540, 560, 561, 563, 564, 576, 577, 582, 583, 589, 590		
	1-214-149-00	METAL 5.1K 1% 1/4W

Ref. No.	Part No.	Description
IC602, 611	8-759-379-15	FS7915M
IC606	8-759-900-04	SN74LS04N
IC501, 504, 551, 554	8-759-903-54	LF357AH
IC502, 505, 552, 555	8-759-903-56	LF356H
IC607, 608, 609	8-759-905-06	TL506CN
IC503, 553	8-759-926-88	S2688
Q611	8-765-212-30	2SA925-Z3
	A-4335-147-A	AUDIO CONTROL UNIT (PCM-100)
C510, 560, 635	1-101-004-00	CERAMIC 0.01 2% 50V
C636, 655	1-107-085-00	MICA 100P 5% 50V
C607	1-107-102-00	MICA 5P ± 0.5P 50V
C607, 557	1-107-275-00	MICA 0.015 5% 100V
C639	1-108-571-00	MYLAR 0.0047 5% 50V
C621	1-108-579-00	MYLAR 0.01 5% 50V
C622	1-108-585-00	MYLAR 0.018 5% 50V
C614	1-108-611-00	MYLAR 0.22 5% 50V
C601, 603, 649, 651	1-121-941-00	ELECT SINGLE 470 H% 35V
C602, 604, 650, 652	1-121-944-00	ELECT SINGLE 1000 H% 16V
C653	1-123-465-00	ELECT 220 20% 6.3V
C617, 634	1-131-209-61	TANTAL 0.1 10% 35V
C630	1-131-211-61	TANTAL 0.22 10% 35V
C608, 609, 612, 613, 618, 620, 623, 625, 633, 640, 641, 646, 647, 648, 654	1-131-449-00	TANTAL 3.3 20% 16V
C501–506, 508, 509, 511–521, 551–556, 559, 561–571, 605, 606, 615, 616, 619, 624, 626–629, 631, 632, 637, 638, 642–645	1-131-450-00	TANTAL 1.0 20% 35V

Ref. No.	Part No.	Description
R685, 686	1-212-516-11	METAL 200 1% 1/2W
R546, 596	1-212-709-11	METAL 200K 1% 1/2W
R618	1-212-718-11	METAL 470K 1% 1/2W
R607–612, 681	1-214-084-00	METAL 10 1% 1/4W
R604	1-214-100-00	METAL 47 1% 1/4W
R691	1-214-104-00	METAL 68 1% 1/4W
R601	1-214-105-00	METAL 75 1% 1/4W
R537, 538, 544, 545, 587, 588, 594, 595, 613, 614	1-214-108-00	METAL 100 1% 1/4W
R535, 536, 542, 543, 585, 586, 592, 593, 638	1-214-120-00	METAL 330 1% 1/4W
R522, 527, 532, 547, 572, 573, 575, 576	1-214-124-00	METAL 470 1% 1/4W
R522, 572	1-214-128-00	METAL 560 1% 1/4W
R660	1-214-128-00	METAL 680 1% 1/4W
R520, 525, 570, 575, 617, 623, 626, 633, 634, 639, 649, 650, 651, 653, 662, 663, 665, 674, 677, 678, 687	1-214-132-00	METAL 1K 1% 1/4W
R615	1-214-138-00	METAL 1.5K 1% 1/4W
R625	1-214-137-00	METAL 1.8K 1% 1/4W
R602, 638, 644, 668, 669	1-214-140-00	METAL 2.2K 1% 1/4W
R628	1-214-141-00	METAL 2.4K 1% 1/4W
R616, 657, 658	1-214-144-00	METAL 3.3K 1% 1/4W
R505, 506, 520, 521, 535, 537, 540, 541, 643, 646, 656, 667, 684, 690	1-214-148-00	METAL 4.7K 1% 1/4W
R510, 511, 513, 514, 526, 527, 532, 533, 539, 540, 560, 561, 563, 564, 576, 577, 582, 583, 589, 590	1-214-149-00	METAL 5.1K 1% 1/4W

Ref. No.	Part No.	Description
R523, 573	1-214-150-00	METAL 5.6K 1% 1/4W
R671	1-214-152-00	METAL 6.8K 1% 1/4W
R603, 631	1-214-154-00	METAL 8.2K 1% 1/4W
R629	1-214-155-00	METAL 9.1K 1% 1/4W
R521, 571, 619, 624, 645, 654, 666, 670, 680, 688, 689	1-214-156-00	METAL 10K 1% 1/4W
R630, 679	1-214-158-00	METAL 12K 1% 1/4W
R642	1-214-159-00	METAL 13K 1% 1/4W
R659	1-214-160-00	METAL 15K 1% 1/4W
R665	1-214-164-00	METAL 22K 1% 1/4W
R519, 569, 655, 683	1-214-172-00	METAL 47K 1% 1/4W
R524, 574, 682	1-214-180-00	METAL 100K 1% 1/4W
R516, 566	1-214-849-11	METAL 240 1% 1/2W
R531, 581	1-214-850-11	METAL 270 1% 1/2W
R505, 506, 518, 530, 546, 555, 556, 568, 580, 596	1-214-864-11	METAL 1.0K 1% 1/2W
R541, 591	1-214-872-11	METAL 2.2K 1% 1/2W
R528, 578	1-214-873-11	METAL 2.4K 1% 1/2W
R515, 565	1-214-875-11	METAL 3.0K 1% 1/2W
R501–504, 507–509, 512, 551–554, 557–559, 562	1-214-880-11	METAL 4.7K 1% 1/2W
R529, 579	1-214-881-11	METAL 5.1K 1% 1/2W
R534, 584	1-214-897-11	METAL 22K 1% 1/2W
R517, 567	1-214-927-11	METAL 390K 1% 1/2W
VR501–505, 508, 551–555, 558	1-226-143-11	METAL GLAZE 10K
VR506, 507, 556, 557	1-226-477-11	METAL FILM 1K
VR509, 559	1-226-751-11	METAL GLAZE 20K
L601	1-407-282-00	VRIABLE INDUCTOR 0.47mH
D501–504, 551–554, 601, 605–609, 614–616	8-719-815-55	1S1555
D602–604, 610–613	8-719-912-00	MV-12N

Ref. No.	Part No.	Description
Q501–504, 551–554	8-727-302-00	2SK42-2
Q602, 604, 607, 612, 614, 618, 619	8-729-103-37	2SA733-P
Q601, 603, 608, 609, 615, 616, 617, 620, 621, 622, 680–684	8-729-163-47	2SC1634-P
Q506, 508, 556, 558	8-729-307-65	2SJ76
Q505, 507, 555, 557	8-729-321-35	2SK213
Q605, 606, 610, 613	8-729-671-14	2SC710-14
IC603	8-759-115-90	μPC159A
IC601, 610	8-759-378-15	FS7815M
IC602, 611	8-759-379-15	FS7915M
IC606	8-759-900-04	SN74LS04N
IC507, 508, 557, 558	8-759-903-55	LF357H
IC501–504, 506, 551–554, 556	8-759-903-56	LF356H
IC607, 608, 609	8-759-905-06	TL506CN
IC505, 555	8-759-926-88	S2688
Q611	8-765-212-30	2SA925-23

Ref. No.	Part No.	Description
R523, 573	1-214-150-00	METAL 5.6K 1% 1/4W
R571	1-214-152-00	METAL 6.8K 1% 1/4W
R603, 631	1-214-154-00	METAL 8.2K 1% 1/4W
R629	1-214-155-00	METAL 9.1K 1% 1/4W
R521, 571, 619, 624, 645, 664, 666, 670, 680, 688, 689	1-214-156-00	METAL 10K 1% 1/4W
R630, 679	1-214-158-00	METAL 12K 1% 1/4W
R642	1-214-159-00	METAL 13K 1% 1/4W
R655	1-214-160-00	METAL 15K 1% 1/4W
R665	1-214-164-00	METAL 22K 1% 1/4W
R519, 569, 655, 683	1-214-172-00	METAL 47K 1% 1/4W
R524, 574, 682	1-214-180-00	METAL 100K 1% 1/4W
R516, 568	1-214-849-11	METAL 240 1% 1/2W
R531, 581	1-214-850-11	METAL 270 1% 1/2W
R505, 506, 518, 530, 546, 555, 556, 568, 580, 596	1-214-864-11	METAL 1.0K 1% 1/2W
R541, 591	1-214-872-11	METAL 2.2K 1% 1/2W
R528, 578	1-214-873-11	METAL 2.4K 1% 1/2W
R515, 565	1-214-875-11	METAL 3.0K 1% 1/2W
R501–504, 507–509, 512, 551–554, 557–559, 562	1-214-880-11	METAL 4.7K 1% 1/2W
R529, 579	1-214-881-11	METAL 5.1K 1% 1/2W
R534, 584	1-214-897-11	METAL 22K 1% 1/2W
R517, 567	1-214-927-11	METAL 390K 1% 1/2W
VR501–505, 508, 551–555, 558	1-226-143-11	METAL GLAZE 10K
VR506, 507, 556, 557	1-226-427-11	METAL FILM 1K
VR509, 559	1-226-751-11	METAL GLAZE 20K
L601	1-407-282-00	VRIABLE INDUCTOR 0.47mH
D501–504, 551–554, 601, 605–609, 614–616	8-719-815-55	1S1555
D602–604, 610–613	8-719-912-00	MV-12N

Ref. No.	Part No.	Description
Q501–504, 551–554	8-727-302-00	2SK42-2
Q602, 604, 607, 612, 614, 618, 619	8-729-103-37	2SA733-P
Q601, 603, 608, 609, 615, 616, 617, 620, 621, 622, 680–684	8-729-163-47	2SC1634-P
Q506, 508, 556, 558	8-729-307-65	2S176
Q505, 507, 555, 557	8-729-321-35	2SK213
Q605, 606, 610, 613	8-729-671-14	2SC710-14
IC603	8-759-115-90	μPC159A
IC601, 610	8-759-378-15	FS7815M
IC602, 611	8-759-379-15	FS7915M
IC606	8-759-900-04	SN74LS04N
IC507, 508, 557, 558	8-759-903-55	LF355H
IC501–504, 506, 551–554, 556	8-759-903-56	LF356H
IC507, 508, 609	8-759-905-06	TL506CN
IC505, 555	8-759-926-88	S2688
Q611	8-765-212-30	2SA925-23

DIGITAL I/O UNIT

Ref. No.	Part No.	Description
	A-4335-122-A	DIGITAL (I/O) UNIT (PCM-100)
C1230, 1232, 1233, 1234	1-107-061-00	MICA 10P 5% 50V
C1231	1-108-579-00	MYLAR 0.01 5% 50V
C1228	1-108-585-00	MYLAR 0.018 5% 50V
C1235	1-123-478-00	ELECT 1000 20% 10V
C1236	1-131-199-61	TANTAL 10 10% 16V
C1242	1-131-344-61	TANTAL ELECT 0.33 10% 35V
C1201–1227, 1239–1241	1-131-449-00	TANTAL 3.3 20% 16V
C1237, 1238	1-131-450-00	TANTAL 1.0 20% 35V
R1227, 1228	1-214-084-00	METAL 10 1% 1/4W
R1226	1-214-104-00	METAL 68 1% 1/4W
R1201–1210	1-214-105-00	METAL 75 1% 1/4W
R1222	1-214-112-00	METAL 150 1% 1/4W
R1213	1-214-116-00	METAL 220 1% 1/4W
R1215	1-214-124-00	METAL 470 1% 1/4W
R1224	1-214-130-00	METAL 820 1% 1/4W
R1214, 1216–1220	1-214-132-00	METAL 1K 1% 1/4W
R1221	1-214-136-00	METAL 1.5K 1% 1/4W
R1223, 1225	1-214-160-00	METAL 15K 1% 1/4W
R1211, 1229	1-214-180-00	METAL 100K 1% 1/4W
D1201, 1202	8-719-301-03	SEL103R
Q1203	8-729-364-92	2SB649-C
Q1204	8-729-366-92	2SD669-C
Q1201, 1202	8-729-387-27	2SA872-D
IC1272	8-759-115-90	μPC159A
IC1223	8-759-900-00	SN74LS00N
IC1219	8-759-900-02	SN74LS02N
IC1221, 1243, 1257, 1269	8-759-900-04	SN74LS04N
IC1206	8-759-900-09	SN74LS09N
IC1209, 1231	8-759-900-11	SN74LS11N
IC1212, 1266	8-759-900-27	SN74LS27N
IC1211, 1215, 1217 1220, 1258, 1267	8-759-900-32	SN74LS32N
IC1222, 1225, 1230, 1233, 1239, 1241, 1244, 1252, 1265, 1280, 1281	8-759-900-74	SN74LS74N
IC1229	8-759-900-86	SN74LS86N
IC1214	8-759-901-23	SN74LS123N
IC1235, 1236, 1249, 1250, 1261, 1273 1274	8-759-901-63	SN74LS163A
IC1205, 1208, 1210, 1213, 1216, 1224, 1227, 1228, 1232, 1234, 1242, 1247, 1248, 1251, 1254, 1255, 1259, 1263, 1264, 1276, 1277, 1278, 1279	8-759-901-64	SN74LS164N
IC1218, 1226, 1240, 1256	8-759-901-66	SN74LS166N
IC1262	8-759-910-04	SN74S04N
IC1260	8-759-910-08	SN74S08N
IC1246	8-759-910-10	SN74S10N
IC1253	8-759-910-32	SN74S32N
IC1270, 1271	8-759-910-74	SN74S74N
IC1245	8-759-911-86	SN74S86N
IC1237, 1238, 1268	8-759-910-63	SN74S163N
IC1201, 1207	8-759-951-22	SN75122N
IC1202–1204	8-759-951-23	SN75123N

DIGITAL I/O UNIT

A-4235-122-A DIGITAL (I/O) UNIT (PCM-100)

Ref. No.	Part No.	Description
C1230, 1232, 1233, 1234	1-107-061-00	MICA 10p 5% 50V
C1231	1-108-579-00	MYLAR 0.01 5% 50V
C1232	1-108-585-00	MYLAR 0.018 5% 50V
C1235	1-123-478-00	ELECT 1000 20% 10V
C1236	1-131-199-81	TANTAL 10 10% 16V
C1242	1-131-344-61	TANTAL ELECT 0.33 10% 35V
C1201–1227, 1239–1241	1-131-449-00	TANTAL 3.3 20% 16V
C1237, 1238	1-131-450-00	TANTAL 1.0 20% 35V
R1227, 1228	1-214-084-00	METAL 10 1% 1/4W
R1226	1-214-104-00	METAL 68 1% 1/4W
R1201–1210	1-214-105-00	METAL 75 1% 1/4W
R1222	1-214-112-00	METAL 150 1% 1/4W
R1213	1-214-116-00	METAL 220 1% 1/4W
R1215	1-214-124-00	METAL 470 1% 1/4W
R1224	1-214-130-00	METAL 820 1% 1/4W
R1214, 1216–1220	1-214-132-00	METAL 1K 1% 1/4W
R1221	1-214-136-00	METAL 1.5K 1% 1/4W
R1223, 1225	1-214-160-00	METAL 15K 1% 1/4W
R1211, 1229	1-214-180-00	METAL 100K 1% 1/4W
D1201, 1202	8-719-301-03	SEL103R
D1203	8-729-364-92	2SB649-C
D1204	8-729-356-92	2SD669-C
Q1201, 1202	8-729-387-27	2SA872-D
IC1272	8-759-116-90	μPC159A
IC1223	8-759-900-00	SN74LS00N
IC1219	8-759-900-02	SN74LS02N
IC1221, 1243, 1257, 1259	8-759-900-04	SN74LS04N
IC1206	8-759-900-09	SN74LS09N
IC1209, 1231	8-759-900-11	SN74LS11N
IC1212, 1266	8-759-900-27	SN74LS27N
IC1211, 1215, 1217, 1220, 1258, 1267	8-759-900-32	SN74LS32N
IC1222, 1225, 1230, 1233, 1239, 1241, 1244, 1252, 1265, 1280, 1281	8-759-900-74	SN74LS74N
IC1229	8-759-900-86	SN74LS86N
IC1214	8-759-901-23	SN74LS123N
IC1235, 1236, 1249, 1250, 1261, 1273, 1274	8-759-901-63	SN74LS163A
IC1205, 1208, 1210, 1213, 1218, 1224, 1227, 1228, 1232, 1234, 1242, 1247, 1248, 1251, 1254, 1255, 1259, 1263, 1264, 1276, 1277, 1278, 1279	8-759-901-64	SN74LS164N
IC1218, 1226, 1240, 1256	8-759-901-66	SN74LS166N
IC1262	8-759-910-04	SN74S04N
IC1260	8-759-910-08	SN74S08N
IC1246	8-759-910-10	SN74S10N
IC1253	8-759-910-32	SN74S32N
IC1270, 1271	8-759-910-74	SN74S74N
IC1245	8-759-911-86	SN74S86N
IC1237, 1238, 1268	8-759-910-63	SN74S163N
IC1201, 1207	8-759-951-22	SN75122N
IC1202–1204	8-759-951-23	SN75123N

Ref. No.	Part No.	Description

MISCELLANEOUS

R445, 446	1-231-364-11	ENCAPSULATED COMPONENT (PCM-10)
LPF401—404		
	1-231-672-11	FILTER, LOWPASS (PCM-10)
	1-231-678-00	FILTER, LOWPASS (PCM-100)
RY401, 601		
	1-515-297-00	RELAY, LEAD (PCM-10)
RY401	1-515-297-00	RELAY, LEAD (PCM-100)
RY501, 551		
	1-515-297-11	RELAY, LEAD (PCM-100)
RY602	1-515-323-00	RELAY (PCM-10)
RY601	1-515-323-00	RELAY (PCM-100)
	1-526-594-21	IC SOCKET 14P (PCM-10/100)
	1-526-594-31	IC SOCKET 16P (PCM-10/100)
	1-526-594-41	IC SOCKET 18P (PCM-10/100)
	1-526-594-51	IC SOCKET 20P (PCM-10/100)
	1-526-594-71	IC SOCKET 24P (PCM-10/100)
	1-526-670-11	IC SOCKET 32P (PCM-100)

Ref. No.	Part No.	Description
MISCELLANEOUS		
R445, 446	1-231-364-11	ENCAPSULATED COMPONENT (PCM-10)
LPF401—404		
	1-231-872-11	FILTER, LOWPASS (PCM-10)
	1-231-878-00	FILTER, LOWPASS (PCM-100)
RY401, 601		
	1-515-297-00	RELAY, LEAD (PCM-10)
RY401	1-515-297-00	RELAY, LEAD (PCM-100)
RY501, 551		
	1-515-297-11	RELAY, LEAD (PCM-100)
RY602	1-515-323-00	RELAY (PCM-10)
RY601	1-515-323-00	RELAY (PCM-100)
	1-526-594-21	IC SOCKET 14P (PCM-10/100)
	1-526-594-31	IC SOCKET 18P (PCM-10/100)
	1-526-594-41	IC SOCKET 18P (PCM-10/100)
	1-526-594-51	IC SOCKET 20P (PCM-10/100)
	1-526-594-71	IC SOCKET 24P (PCM-10/100)
	1-526-670-11	IC SOCKET 32P (PCM-100)